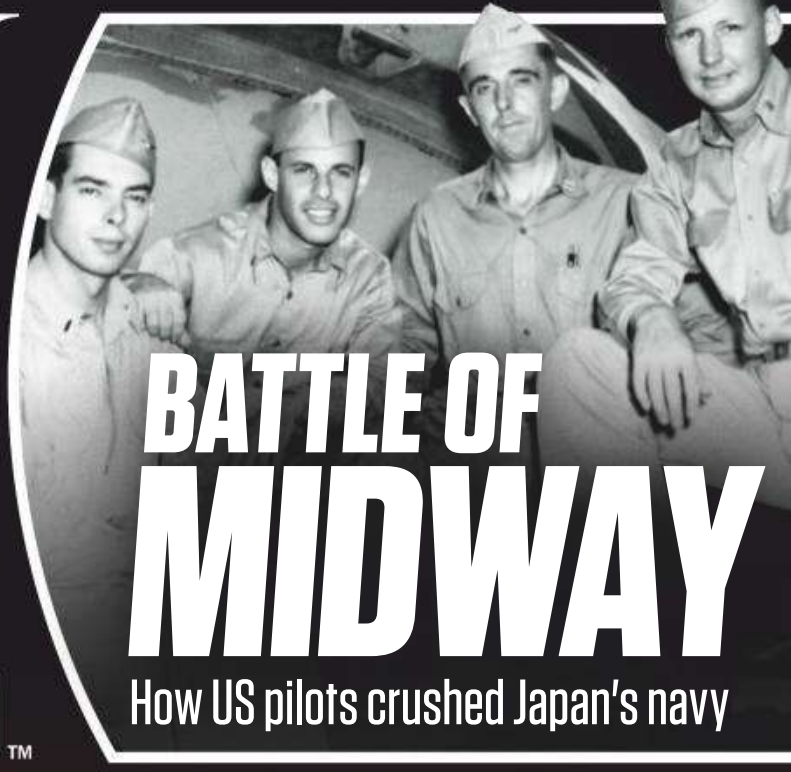
BRITAIN'S BEST MILITARY HISTORY MAGAZINE

HISTORY of WAR



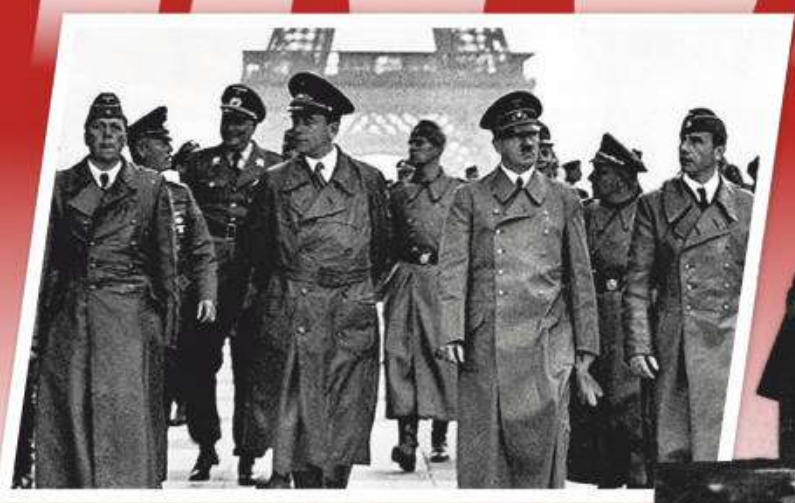
BATTLE OF MIDWAY

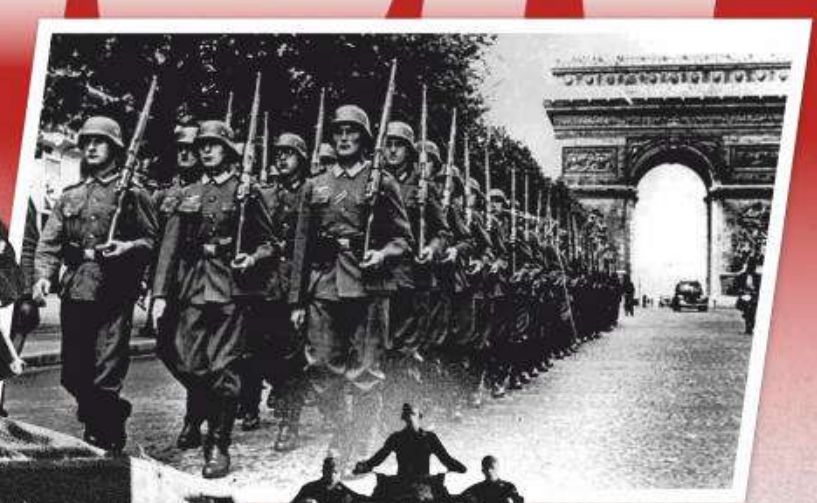
How US pilots crushed Japan's navy

1940

PANZER INVASION

Tank experts reveal how speed, surprise & superior tactics conquered France in weeks





FUTURE

ISSUE 081

AH-64 APACHE

Inside the arsenal of America's deadly gunship

VICTORIA CROSS

True Canadian valour in deadly airborne assault

RISE OF THE COSSACKS

Brutal history of Russia's toughest warriors

KING & COUNTRY

UK AUTHORISED DEALER

The ROYAL MARINES are the UK'S Commando Force and the Royal Navy's own amphibious troops. They are one of the world's most elite fighting forces and are optimized for global rapid response and able to handle a wide spectrum of threats and security challenges.

Founded in 1664 the *'Royals'* have seen action in every corner of the world over the centuries, from the *'Seven Years War'* all the way up to the more recent conflicts in *Iraq* and *Afghanistan*.

During that time they have formed close military ties with other allied Marine forces, particularly the *United States Marine Corps* and the Dutch *Korps Mariners*.

Their distinctive dark blue parade dress, as shown here, is usually worn with the white *'Wolseley'* pattern pith helmet.

These all-new King & Country *'Royal Marines'* are seen carrying the older *L1A1 Self Loading Rifles* with fixed bayonets which were in British military service from the late 1950's up until the early 1980's.

K&C's own cofounder and creative director, *Andy C. Neilson* served as a Royal Marine Commando from 1972-1977, hence the choice of rifle.

All of the figures shown *(plus some others coming later)* will be available as single figures and in *'Value Added Sets'*.

So, don't delay...

Start forming your parade today!

Royal Marines on Parade

CUSTOMS & UNIFORMS

The Royal Marines have a proud history and many unique traditions. Their Latin motto, ***"Per Mare Per Terram"*** translates as *"By Sea and By Land"*. This aptly describes their ability and agility to fight as well on land or at sea on board ships of the Royal Navy.

The Royal Marines cap badge shows a British lion atop a royal crown sitting above a globe of the world surrounded by a laurel wreath.

Please Note:

All our 1:30 scale, all-metal, hand-painted toy soldiers are approximately $2^1/_2$ inches high.

MAGPIE

(MANCHESTER HOUSE) LTD.

Mail Order Worldwide

© 2020 • KING & COUNTRY

KING & COUNTRY HEADQUARTERS
Suite 2301, 23rd Floor, No.3 Lockhart Road,
Wanchai, Hong Kong
Tel: (852) 2861 3450
E-mail: sales@kingandcountry.com

MAGPIE OPENING TIMES

DAILY 9:00AM - 5:30PM
CLOSED WEDNESDAY & SUNDAY

MAGPIE
1 High Street, Evesham
Worcestershire, WR11 4DA. England UK
Tel: 01386 41631
eBay shop: Manchester House Collectables
Email: magpie2500@aol.com

A German infantryman and Panzer commander greet each other after the capture of Calais, 1940

© Getty

Welcome

By the beginning of 1940 the war between Nazi Germany and the Anglo-French alliance was already entering its fifth month, but since the fall of Poland there had been scant significant tests to either side on the battlefield. This all rapidly changed in the spring of 1940, during which France and the Benelux countries fell to the Nazis, and the British army retreated back across the Channel. In only a few days German Panzer divisions had succeeded in breaking Allied lines. In doing so these mostly diminutive but nonetheless hugely effective war machines had redrawn maps and changed the course of history.

Tim Williamson
Editor-in-Chief

CONTRIBUTORS

TOM GARNER

This issue Tom spoke with Royal Tank Regiment veteran Richard Cutland and curator of the Tank Museum, Bovington, David Willey. Turn to page 20 to discover their analysis of how armour contributed to the 1940 conquest of France.

MIGUEL MIRANDA

Miguel is a writer and researcher based in the Philippines. With an expertise in modern military tech, he also writes widely on topics across Asia and beyond. Over on page 52 he uncovers the origins and traditions of the Cossacks.

JAMES HOLLAND

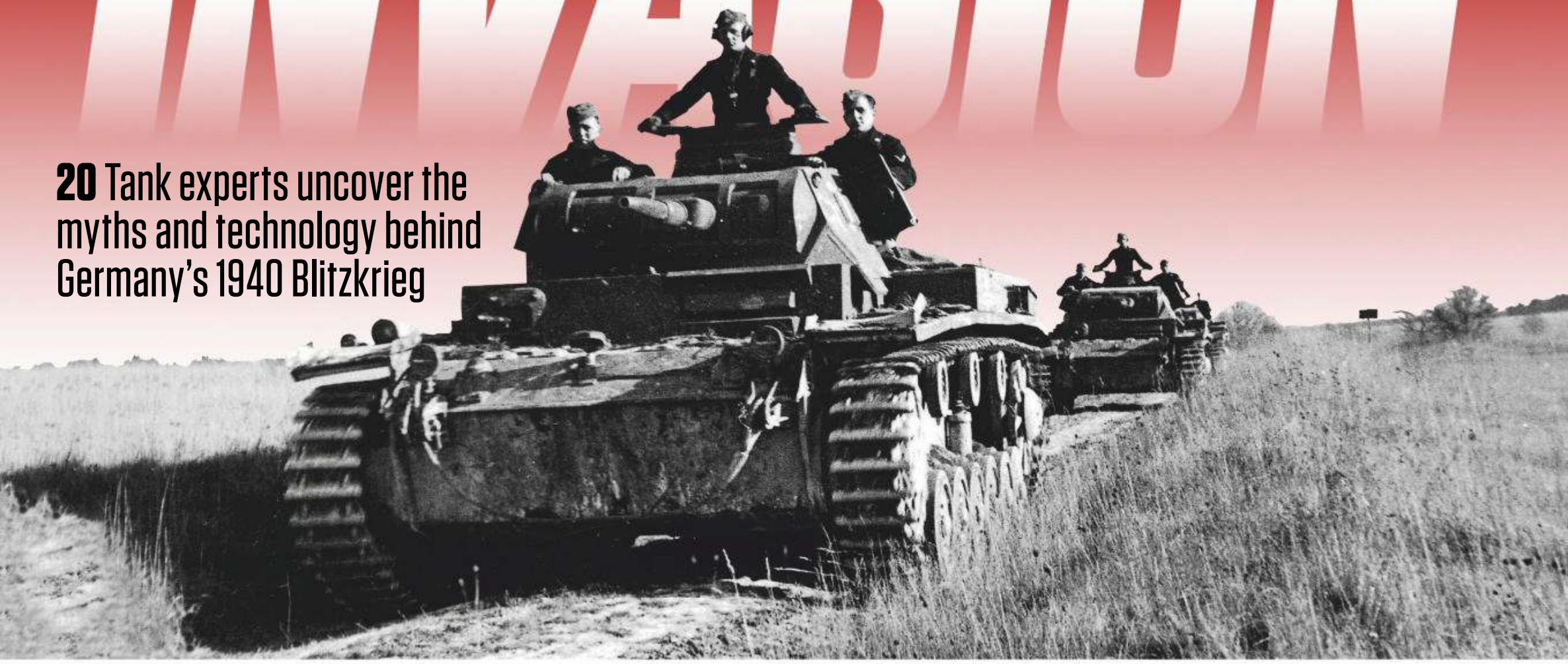
James is an historian, best-selling author and broadcaster, as well as the co-host of weekly podcast 'We Have Ways of Making You Talk'. On page 58 he reveals why the Battle of Midway was one of the most important clashes of WWII.

CRAIG MOORE

Though Panzers are perhaps most associated with the German invasions of May 1940, they did also feature the first major glider assault. On page 32 Craig recounts how paratroopers used them to attack the fortress of Eben-Emael.

PANZER INVASION

20 Tank experts uncover the myths and technology behind Germany's 1940 Blitzkrieg



Frontline

GREAT NORTHERN WAR

10 **TIMELINE**
Charles XII's Swedish Empire is pitted against a coalition, led by Peter the Great's Russia, in a decades-long struggle

14 **KINGS, TSARS AND FIELD MARSHALS**
Members of the nobility and wily battlefield leaders all lent their skills to the conflict

16 **RISE OF RUSSIA**
The aftermath of the Great Northern War saw Russia become a major player in European politics and future conflicts

18 **BATTLE OF NARVA, 1700**
This clash early on in the war was one of King Charles XII's most celebrated victories and a crushing blow to Russian arms

HEROES OF THE VICTORIA CROSS

46 This paratrooper medic risked his life to save others during Operation Varsity

GREAT BATTLES

38 Frederick the Great leads his smaller Prussian army to victory over Austria

06 **WAR IN FOCUS**
Stunning imagery from throughout history

20 **PANZER INVASION**
Two tank experts reveal how German armoured doctrine prevailed in the lighting 1940 campaigns

32 **FIRST STRIKE OF THE FALLSCHIRMJAGER**
Discover how Eben-Emael fortress was stormed by the first major glider assault in military history

GREAT BATTLES

38 **LEUTHEN**
In 1757, Fredrick the Great leads his Prussian army to outmanoeuvre a superior Austrian force

HEROES OF THE VICTORIA CROSS

46 **FREDERICK GEORGE TOPHAM**
Read the inspiring story of how this Canadian paratrooper risked his own life to save his comrades

52 **RISE OF THE COSSACKS**
These fierce warriors have earned a formidable reputation over centuries of warfare

58 **MIDWAY**
Historian James Holland reveals why this Pacific clash was one of the most critical turning points of WWII

OPERATOR'S HANDBOOK

66 **AH-64 APACHE**
Inside Boeing's deadly gunship

Homefront

74 **MUSEUMS ONLINE**
A roundup of the latest exhibitions and collections

76 **WWII IN PHOTOS**
Critical events from this month, 80 years ago

78 **REVIEWS**
The latest military history books and film releases

ARTEFACT OF WAR

82 **BRENNAN TORPEDO**
The world's first guided missile designed to protect British harbours

OPERATOR'S HANDBOOK

66 AH-64 Apache

How the USA's formidable gunship remains a dominant presence on the battlefield

© Getty

WAR in FOCUS

A LUCKY ESCAPE

Taken: ***September, 1936***

French journalist Raymond Vankers dashes across the International bridge over the Bidasoa river, from Irún, Spain, to Hendaye, France, to save a baby during the Battle of Irún, during the Spanish Civil War. Located in the northeastern Basque region, Irún was a key point through which the Republicans were transporting supplies and arms from neighbouring France.

© Getty

WAR in FOCUS

EN GARDE!

Taken: ***c. 1940***

Chinese recruits of the Wang Jingwei collaborationist regime perform bayonet drills in Nanking. After the fall of Shanghai in November 1937, just months into the Second Sino-Japanese War, Japanese forces quickly marched west, towards the Chinese capital. The city fell in less than two weeks, after which began the Nanking Massacre.

TIMELINE OF THE...

GREAT NORTHERN WAR

Sweden and Russia fight for over 20 years to gain imperial supremacy in northern, central and eastern Europe

Source: Wiki / PD-Art

1698-99

CONTINENTAL RIVALRIES

Sweden has been the dominant power around the Baltic Sea since the Thirty Years' War (1618-48) but at the end of the 17th century the country is ruled by a new, teenage king – Charles XII. An anti-Swedish alliance headed by Tsar Peter I ('the Great') of Russia includes Augustus II of Saxony-Poland-Lithuania and Frederik IV of Denmark-Norway. Their joint aim is to reduce Sweden's power.

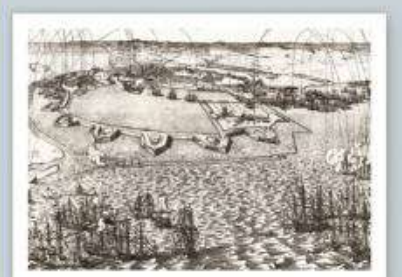
Source: Wiki / PD-Art

Charles XII painted at the age of 15 in the year of his accession to the Swedish throne in 1697

1700

ATTACKS ON SWEDISH TERRITORY

A three-front attack is launched on Swedish territories with Frederik IV invading Holstein-Gottorp, Augustus II advancing through Livonia and a Russian invasion of Ingria. Charles XII invades Zealand, which forces Denmark-Norway out of the war. He then crosses to Livonia where he defeats the Russians and forces of Augustus.



Copenhagen is bombarded by Swedish, Dutch and English forces

Source: Wiki / PD-Art

19 July 1701

CROSSING OF THE DÜNA 01

Charles XII pursues the forces of Augustus II across the River Düna near Riga in modern Latvia. The Swedes set fire to boats to obscure the crossing with smoke and proceed to defeat a numerically superior Saxon-led army. Charles is then able to take region of Courland.

As well as boats, the Swedes also use floating artillery batteries during the crossing

Source: Wiki / PD-Art

SIEGE OF NARVA 03

Peter I marches into Swedish Ingria (part of Estonia) to capture Narva with 20,000 men. The Russians capture the city and hundreds of the Swedish garrison and inhabitants are massacred while thousands more are captured. Narva is incorporated into the Russian Empire.

Peter the Great leads troops while storming Narva

Source: Wiki / PD-Art

Swedish soldiers celebrate Thanksgiving after their victory at Fraustadt

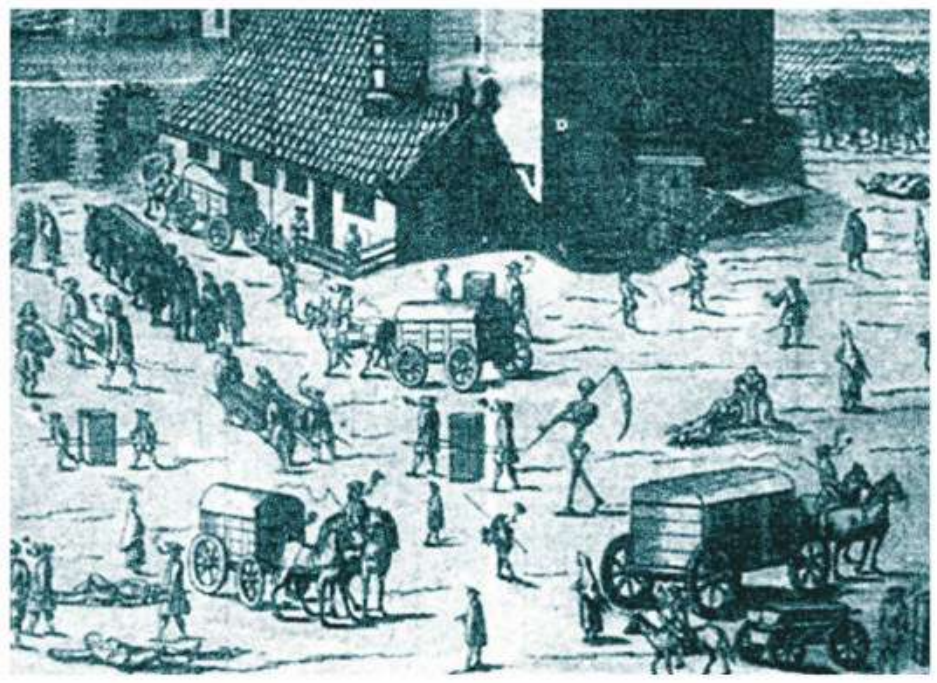
BATTLE OF FRAUSTADT 04

An outnumbered Swedish force of 9,400 men wins a decisive victory at Fraustadt against 20,000 Saxon and Russian troops in Poland. The Swedes use terrain and a famous pincer movement to achieve one of their most remarkable victories of the war.

PLAGUE OUTBREAK

Many towns and areas of the Circum-Baltic and eastern-central Europe suffer a severe outbreak of plague. Wartime conditions exacerbate the spread of disease with the movements of soldiers and refugees unwittingly adding to the suffering. The death toll results in depopulation and the ability of armies to resist attacks and maintain supplies.

A 1709 woodcut of the plague in Danzig with a skeletal reaper surveying his work among the burial of the dead



Source: Wiki / PD-Art

27 May 1703 — 27 June-9 August 1704 — 13 February 1706 — 1708-12 — 1708-09

Source: Wiki / Andrew Shiva

FOUNDATION OF ST PETERSBURG 02

Peter I captures the Swedish fortress of Nyenskans on the mouth of the River Neva at the head of the Gulf of Finland. The tsar then conscripts peasants from across Russia to build a new city – St Petersburg. The Russians now have a port on the Baltic coast and Peter makes it his capital in 1712.

Founded in 1703, the Peter and Paul Fortress is the original citadel of St Petersburg. The fortress is later used as an execution ground by the Bolshevik government during the 1920s

SWEDISH INVASION OF RUSSIA

Charles XII leads an ambitious but risky campaign into Russia by crossing the River Vistula. The Russians adopt a 'scorched earth' policy of retreat and a harsh Russian winter drastically shrinks the Swedish force. This strategy is similarly used against Napoleon in 1812.

Peter the Great fails to destroy a Swedish column at the Battle of Lesnaya in October 1708 although he destroys an captures many artillery pieces and wagons

Source: Wiki / PD-Art

Source: Wiki / Alexrk2

FOUNDATION OF ST PETERSBURG 02

BATTLE OF GANGUT 08

CROSSING OF THE DÜNA 01

SIEGE OF NARVA 03

BATTLE OF HELSINGBORG 06

BATTLE OF FRAUSTADT 04

BATTLE OF POLTAVA 05

SKIRMISH AT BENDER 07

8 July 1709

10 March 1710

1 February 1713

BATTLE OF POLTAVA 05

Peter I decisively defeats Charles XII's depleted army in modern Ukraine. Superior numbers and better supplies enable the Russians to win a total victory. The majority of the Swedes become casualties while Charles is wounded. He escapes with a few hundred men to Ottoman Moldavia and is forced to remain there for several years.

An injured Charles XII considers his options after Poltava. The battle is widely considered to be the beginning of the Swedish Empire's decline

Source: Wiki / PD-Art

BATTLE OF HELSINGBORG 06

Denmark-Norway attacks southern Sweden in an attempt to regain Scania. The invaders are defeated by Magnus Stenbock in an evenly-matched battle on the Ringstorp heights northeast of Helsingborg. The Danes never enter Scania again.

Stenbock exhorts his troops into battle

Source: Wiki / PD-Art

SKIRMISH AT BENDER 07

Whilst in exile in Moldova, Charles XII's camp is attacked by 8,000-13,000 Ottoman troops who wish the Swedes to leave. The meagre Swedish forces inflict hundreds of casualties on the Ottomans before Charles and his men are captured. The Swedes leave the Ottoman Empire shortly afterwards.

During the skirmish, Charles (centre) engages in hand-to-hand combat and sniping with a carbine

Source: Wiki / PD-Art

A BROKEN EMPIRE

A diminished, defeated Sweden end the wars with Russia and its anti-Swedish allies with a series of treaties signed at Fredericksburg, Stockholm and Nystad. The Swedish Empire's territory is divided between Denmark-Norway, Prussia and Hanover although it is Russia that takes the lion's share and becomes a new European power.

The 'Bronze Horseman' equestrian statue of Peter the Great in Senate Square, St Petersburg. Russia's new territories from the war include Estonia, Livonia and Ingria

Source: Wiki / Alex (Florstein) Fedorov

A romanticised 1884 painting of the return of Charles XII's body to Sweden

Source: Wiki / PD-Art

DEATH OF CHARLES XII

Charles XII invades Norway after years of fighting a defensive war from Sweden. He is killed at a minor siege at Fredriksten after being shot in the head while inspecting trenches. Large numbers of his remaining force are killed on the retreat back to Sweden. This becomes known as the 'Carolean Death March'.

30 November 1718

1719-21

7 August 1714

BATTLE OF GANGUT 08

The Imperial Russian Navy wins its first ever important victory off the Hanko Peninsula in southern Finland against a Swedish fleet. The Russians greatly outnumber the Swedes, who put up a spirited fight. They are eventually defeated when the Russians isolate, surround and board their ships.

The encirclement of the Swedish Navy at Gangut in an 18th century etching by Peter the Great's French engraver Maurice Baquoy

Source: Wiki / PD-Art

KINGS, TSARS AND FIELD MARSHALS

The Great Northern War was dominated by monarchs and noble commanders who conducted the conflict with varying levels of competence

CHARLES XII
'THE LION OF THE NORTH'
1682-1718 *SWEDEN*

Source: Wiki / PD Art

Charles was nicknamed 'The Lion of the North' by Voltaire for his military achievements as well as his considerable interests in mathematics and science

During the 17th century, the Swedish Empire had expanded and at its height it included Finland and parts of modern Norway, Germany and the Baltic States. For a relatively small Scandinavian country this was an unprecedented success and it caused resentment among other European powers. When Charles XII came to the throne as a teenager in 1697, a triple alliance of Russia, Denmark-Norway and Saxony-Poland-Lithuania aimed to topple Sweden because they considered its youthful king to be inexperienced and therefore weak. They had not reckoned with the forceful character of Charles.

A contradictory personality, Charles was austere and intelligent but also foolhardy and impulsive. A keen soldier with a gift for fast warfare he was nicknamed the 'Swedish Meteor' and in the early years of the Great Northern War he was a great general. While still a teenager he defeated the Danes and won a huge victory at Narva against the Russians. He was then victorious against Augustus II and even forced him to temporarily abdicate the Polish throne in favour of a Swedish puppet.

Despite this early success, Charles refused to negotiate with his opponents and made the calamitous decision to invade Russia in 1708. Despite an early victory at Holowczyn, Swedish logistics were pushed to breaking point until Charles was decisively defeated by Peter the Great at Poltava in 1709. Forced to flee to sanctuary in the Ottoman Empire for several years, Charles watched from afar while Sweden lost her German possessions. By the time he returned to his kingdom in 1714, Charles was now only strong enough to fight Denmark-Norway. This led to his death at the Siege of Fredriksten in Norway by a shot to the head aged 36. Charles's demise also led to the dissolution of the Swedish Empire, which was a failed conclusion to a tumultuous career. He left a bitter legacy with his countrymen with the playwright August Strindberg describing him as "Sweden's ruin, the great offender".

PETER THE GREAT
THE FOUNDER OF THE RUSSIAN EMPIRE
1672-1725 *RUSSIA*

One of the most significant figures in Russian history, Peter's leadership during the Great Northern War led to victory and established Russia as a great power. Highly intelligent, Peter learned about shipbuilding and artillery in western Europe and was even a certified firearms master. This education led him to establish the Imperial Russian Navy as well as a regular army. His military reforms included the introduction of conscription and the recruitment of foreign specialists.

Although Russia initially floundered during the early stages of the war, Peter founded St Petersburg in 1703, which gave him a Baltic port for the first time. He also commanded several victories including Lesnaya and a decisive triumph at Poltava. His fleet's victory at Gangut also confirmed that his naval policies were successful. With the defeat of Sweden, Peter had himself declared 'Emperor of all Russia' in 1721. The previous Russian tsardom was now an empire.

At six feet, eight inches tall, Peter was one of the tallest rulers in history

Source: Wiki / PD Art

BORIS SHEREMETEV
THE BOYAR WHO HAD A MIXED MILITARY RECORD AGAINST THE SWEDES
1652-1719 *RUSSIA*

A descendent of one of Russia's oldest noble families, Sheremetev had been a young page to Tsar Alexis I before he led armies in the Crimean Khanate. Initially more of a diplomat, he had participated in peace negotiations with Poland and Austria alongside early campaigns with Peter the Great during the 1690s. During the Great Northern War, Sheremetev was a capable but cautious commander who led Russian forces against the Swedes in the Baltic provinces. Apart from Peter himself, he served as commander-in-chief of the Russian Army with Prince Menshikov as his second-in-command.

His 1702 victory at Hummelshof earned him the title of field marshal while he subsequently took the Swedish fortresses and cities of Nöteborg, Nyenskans, Dorpat and Narva. Swedish forces then defeated him at Gemäuerthof and Holowczyn but he had his revenge when he acted as the senior Russian commander below Peter at the Battle of Poltava.

Source: Wiki / PD Art

Sheremetev was awarded the Maltese Cross by the Knights of Saint John. He wore it so proudly that his envious contemporaries snidely nicknamed him 'The envoy of Malta'

MAGNUS STENBOCK
THE HEROIC BUT TRAGIC VICTOR OF HELSINGBORG AND GADESBUCH
1665-1717 *SWEDEN*

The son of a Swedish field marshal, Stenbock began his military career in the Dutch Army before joining the Swedish Army as a major and fighting in the Nine Years' War. After participating in the Battle of Flaurus he was promoted to colonel. At the start of the Great Northern War he was wounded at the Battle of Narva but was promoted to major general and served during the Swedish invasion of Poland (1701-06).

Stenbock was again promoted to collect military funds and as Governor-General of Scania he repelled a Danish army at the Battle of Helsingborg in 1710. He went on to defeat a Danish-Saxon force at the Battle of Gadesbuch in 1712, which led to his promotion to field marshal. However, his reputation was blemished when he burned the German port of Altona before he was captured by the Danes at the Siege of Tönnig in 1714. After a failed escape from Copenhagen, Stenbock was imprisoned the Kastellet fortress and eventually died after years of ill-treatment. He is now considered a Swedish national hero.

Source: Wiki / PD Art

As well as his military achievements, Stenbock was also a talented and recognised poet. He painted during his imprisonment and several of his paintings now form part of the Royal Danish Collection

CARL GUSTAV REHNSKIÖLD
THE VICTOR OF FRAUSTADT AND ARCHITECT OF SWEDEN'S EARLY SUCCESSES
1651-1722 *SWEDEN*

Born in Swedish Pomerania to a family of German descent, Rehnskiöld joined the Swedish Army aged 22 and first gained military experience during the Scanian War (1676-79). Before the Great Northern War, he was promoted to general and commanded the Swedish cavalry before he became Charles XII's chief military advisor.

In the early years of the war, Rehnskiöld drafted plans for several of Sweden's great successes including the landing at Humlebæk, the crossing of the Düna and the battles of Narva and Kliszów. He personally won one of the great Swedish victories of the war at Fraustadt in 1706 where his cavalry skills secured success despite being greatly outnumbered. For this triumph, Rehnskiöld was promoted to field marshal and given the title of count.

When Charles XII was wounded shortly before the Battle of Poltava, Rehnskiöld replaced him in command but the Swedes were heavily defeated. Rehnskiöld was captured by the Russians and remained in captivity in Moscow before he was released in a prisoner exchange in 1718. He briefly reunited with Charles XII at the Siege of Fredriksten before the king was killed.

Source: Wiki / PD Art

Rehnskiöld died in 1722 of an old shrapnel wound he had received 13 years earlier at the Siege of Veprik

AUGUSTUS II
THE OVERAMBITIOUS MONARCH WHO ENCOURAGED THE WAR BUT LOST HIS THRONE
1670-1733 *SAXONY-POLAND-LITHUANIA*

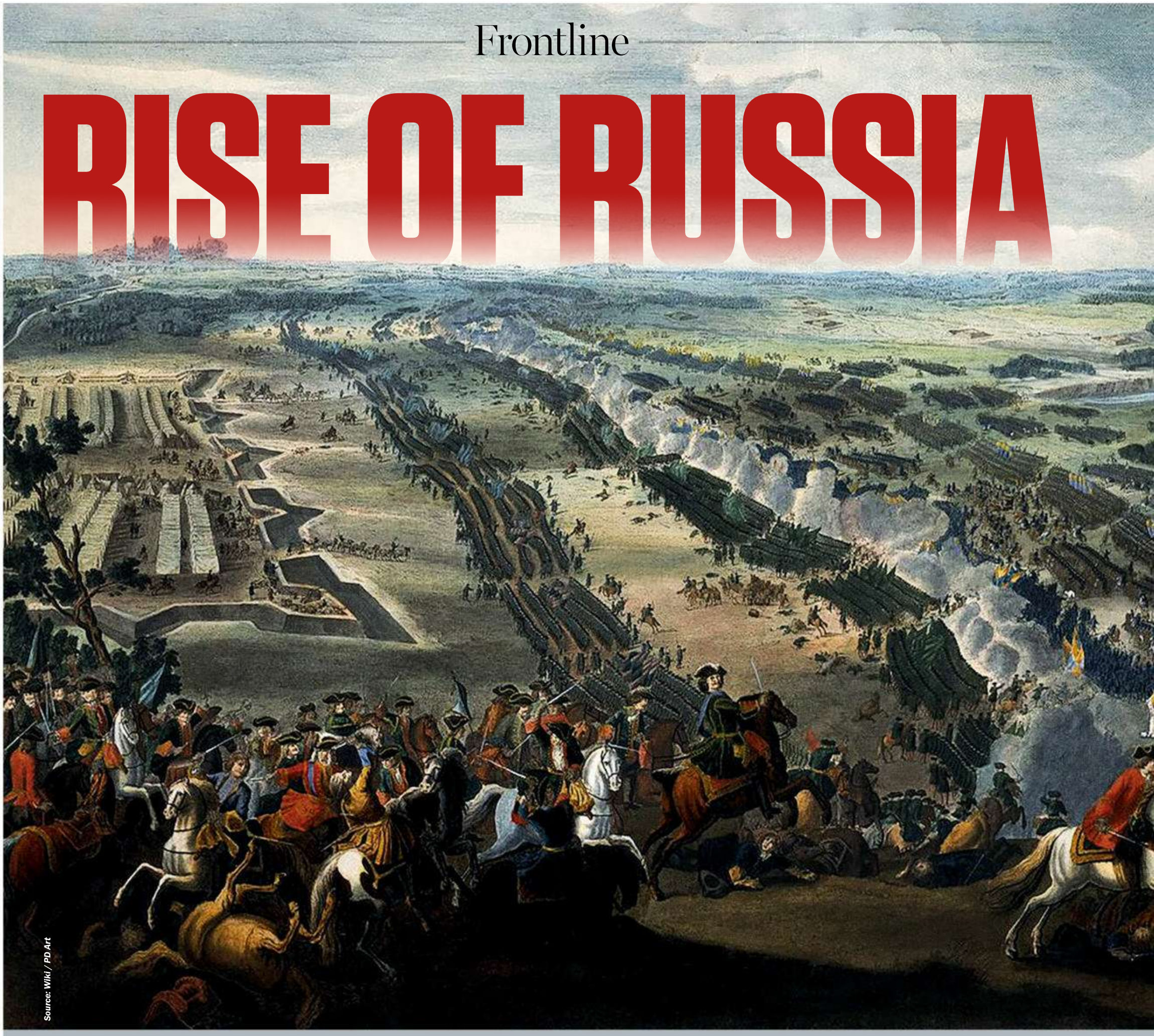
The son of Elector John George IV of Saxony, Augustus succeeded his father in 1694. He was then elected as king of the Polish-Lithuanian Commonwealth in 1697 out of 18 candidates after converting to Roman Catholicism from Lutheranism. His ambitions to conquer Swedish Livonia (which had previously been a Polish province) led to Augustus forming the triple alliance with Russia and Denmark-Norway, which began the Great Northern War.

The conflict greatly damaged the Polish economy while Augustus was continually defeated by the Swedes. He personally lost the Battle of Kliszów while his forces were beaten at Riga and Pułtusk. Warsaw was captured and civil war broke out. After the Swedes won the Battle of Fraustadt, Augustus was forced to abdicate the Polish throne in 1706 and was replaced by a Swedish puppet, Stanisław Leszczynski. When Peter the Great won the Battle of Poltava, Augustus was able to regain his throne but Russia annexed Livonia in 1720. By the time of his death in 1733, Poland had lost its status as a great European power.

Despite his failures, Augustus was known as 'the Strong' because he could break horseshoes with his bare hands. Princess Wilhelmine of Prussia also claimed that he fathered hundreds of illegitimate children

Source: Wiki / PD Art

RISE OF RUSSIA



Source: Wiki / PD Art

Following the Great Northern War, Russia succeeded Sweden as the dominant power in northern Europe, but allied nations may only have exchanged one leading influence for another

In 1703, Tsar Peter the Great of Russia founded the city of St Petersburg on the site of a captured fortress in the province of Ingermanland. His army had taken the territory from Sweden, and his vision to vanquish Russia's northern rival finally appeared possible. Still, the Great Northern War was to last more than two decades, from 1700-1721.

Coalition warfare ebbed and flowed as the nations and principalities of northern Europe sought to throw off the yoke of Swedish military, political and economic dominance that had existed for a half century since the days of the famed Gustavus Adolphus. When 15-year-old Charles XII ascended to the throne of the Swedish empire, the rulers of Russia, Denmark and Poland-Saxony believed their cause was ripe. However, the balance of power did not shift precipitously until the great Russian victory at Poltava in July 1709. Even then, Charles XII persisted until his death in battle at Fredriksheld nine years later. Finally, the last great obstacle to a 'Russian' peace was removed.

When the Great Northern War ended, there was no doubt as to the preeminence of Russia in northern and eastern Europe. St Petersburg became famous as Peter the Great's 'Window to the West', a symbol of a burgeoning empire that would remain dominant, for better or worse, for the next 300 years – and remains so today.

The coalition victory in the Great Northern War relegated Sweden to secondary status, and four separate treaties signed between 1719 and 1721 stripped the fallen empire of much of its territory and influence. During

This artist's rendering depicts the decisive Russian victory at the Battle of Poltava in 1709 during the Great Northern War

the protracted conflict, Russia had seized all Swedish lands along the east coast of the Baltic Sea, including Estonia, Lovinia, Finland and Ingermanland. The Treaty of Nystad formalised these conquests, while Russia retained southern Finland and relinquished the rest of that territory to Sweden along with a payment of two million silver coins. The agreement marked the end of imperial Sweden, which then entered a period of parliamentary rule known as the 'Age of Liberty'. Conversely, Russia rose to prominence with Peter the Great leading a vast and vibrant new empire.

In essence, Russia's former allies found themselves subservient to a new colossus, exchanging Swedish hegemony for Russian. Access to the port cities of the Baltic facilitated growing trade and the extension of Russian culture in northern Europe. While initiating progressive reforms and programs within Russia during the 'Age of Enlightenment', Peter the Great abolished many of the feudal and Medieval practices of a previously 'backward' Tsardom, replacing old convention with 'Westernised' governmental and educational institutions. As these reforms were initiated within, Peter continually invested in the improvement of St Petersburg, a monument to his vision of expanding power and prestige and the Western perspective of the Russian empire in Europe. The city was renowned for its beauty, and the construction of the Peterhof palace, which became known as the Russian Versailles, reflected the emerging stature of the empire.

As the northern and eastern frontiers of the Russian empire stabilised, Peter utilised the catalyst of military victory to expand Russian influence further beyond the empire's borders. With the Russian army gaining proficiency, Peter was instrumental in the growth and strengthening of the Russian navy following the Great Northern War and the hard-won access to the Baltic. In 1722-1723, he turned to the south, confident in the military that had once been considered inferior – and even something of a joke among those of other major powers. His expedition into Persia greatly expanded Russian territory in the regions of the Caucasus and the Caspian Sea. His later alliance with Persia countered the rival Ottoman Empire in the eastern Mediterranean and the Black Sea.

Although his 42-year reign ended with his early death at age 52 in 1725, Peter the Great had laid the foundation of Russian influence for the next three centuries. Traditional European powers, including Great Britain and France, were compelled to acknowledge Russian economic and political prowess, wary of their extension further westward. Peter the Great's victory in the Great Northern War, though only accomplished after years of bitter fighting, elevated Russia from a feudal bit player on the world stage to the foremost power in eastern and northern Europe and a worthy competitor for empire across the globe.

Tsar Peter the Great ruled in Russia for 42 years and led the empire to focus on a Western perspective

"ST PETERSBURG BECAME FAMOUS AS PETER THE GREAT'S 'WINDOW TO THE WEST', A SYMBOL OF A BURGEONING EMPIRE THAT WOULD REMAIN DOMINANT, FOR BETTER OR WORSE, FOR THE NEXT 300 YEARS – AND REMAINS SO TODAY"

Source: Wiki / Erik Cornelius / Nationalmuseum

NARVA 1700

Charles XII led a numerically inferior Swedish army to a remarkable victory against Russian forces while relieving a besieged city in Estonia

Despite Sweden's ultimate defeat in the Great Northern War, its decisive victory at Narva was a key early battle that ensured the conflict would be prolonged and bloody. The war had begun on 22 February 1700 when a coalition of Russia, Denmark-Norway and Saxony-Poland-Lithuania launched an unprovoked attack against Sweden. Their aim was to weaken the Swedish Empire, particularly in the region of what is now the Baltic States. The Swedes had not fought a conflict since the Scanian War of 1675-79 where they had suffered a serious defeat and loss of territory in Pomerania. Their current king was Charles XII who had ascended the throne in 1697 but was still only 17 years old in February 1700.

The coalition expected an easy victory against the Swedish teenage monarch but the inexperienced Charles was already a confident commander. He successfully invaded Zealand and knocked Denmark-Norway out of the war by the terms of the Treaty of Travendal in August 1700. He then turned his forces east to deal with the substantial threat from the Russians in Swedish territory that now forms part of Estonia.

The fortress city of Narva – with its garrison of 1,800 men – was one such place that was under threat from Russian encroachment. It had been besieged since September 1700 by approximately 35,000-38,000 soldiers from Tsar Peter the Great's armies while Saxon-Polish troops under Augustus II had planned to camp outside Riga in Swedish Livonia. The more immediate threat came from the Russians who began bombarding Narva on 31 October.

Charles decided to advance on the city with only 8,000-10,000 men. Peter the Great left

Source: Wiki / PD Art

Narva and left the command of his army to the German field marshal, Charles Eugène de Croÿ. The Russians outnumbered the Swedes by three to one and were able to entrench themselves in the contravallations (field fortifications) around Narva. Nevertheless, the contravallations were too long for the Russians to properly defend, which was an unexpected weakness that Charles chose to exploit on 30 November 1700.

A bold attack

Against this battle line, the Swedes used the cover a sudden blizzard to concentrate their attack on two points by advancing in columns of infantry and horsemen. This was too quick for the Russians to deploy their artillery and Charles's men managed to break through the two points. De Croÿ was caught out by speed of the Swedish army and believed their small size was only the advance guard of a larger force. This miscalculation had an impact throughout the Russian besiegers with the 5,000-strong cavalry fleeing their left flank at the first Swedish charge. The Russian infantry subsequently abandoned the right flank and their lines were split in three. The Swedes were then able to fight each split separately.

To make matters worse for the Russians, their contravallations were screened by the Swedish cavalry. Their defences became a barrier that prevented many from escaping the battlefield, although large numbers fled only to be drowned in the River Dvina. Around 6,000-8,000 Russians were killed and 20,000 captured, including De Croÿ. Such were the numbers of prisoners that Charles only kept the officers and allowed the private soldiers safe passages home. The Swedes, however, suffered fatalities of just around 600 and over 1,000 wounded.

Narva was the first substantial battle of the war and an impressive victory for Charles. He had inflicted a catastrophic defeat on the numerically superior Russians but the Swedish army was in such poor condition that he could not consider a follow-up campaign into Russia. He instead turned south into Poland-Lithuania to inflict dramatic defeats on Augustus II. Peter the Great was able to rebuild and improve the quality of his army during the winter of 1700-01 and recover for the following campaign season. Charles may have won the Battle of Narva but the renewal of Russian forces would prolong the war for decades and ultimately lead to his downfall.

"SUCH WERE THE NUMBERS OF PRISONERS THAT CHARLES ONLY KEPT THE OFFICERS AND ALLOWED THE PRIVATE SOLDIERS SAFE PASSAGES HOME"

This painting gives some sense of the wintry conditions that the battle was fought in

CAPTURED FLAGS

THE RUSSIANS SURRENDERED MANY OF THEIR ELABORATE BANNERS AFTER THEY WERE DEFEATED BY THE SWEDES

Before the Narva campaign, Peter the Great formed several new regiments, which required 12 banners each. A colonel would command a regiment and his banner would be white with a golden finial that depicted a Russian eagle. Company flags were coloured and manufactured within the Kremlin in Moscow; 345 were produced for 14 regiments during 1700 and made from Chinese silk of varying quality. This was an improvement on previous flags that had been made of cotton or linen.

The styles of the banners varied slightly with the Russian Order of Saint Andrew being depicted in black or white. All of them included religious motifs, including a cross, the Holy Lance and Sponge, the Virgin Mary, the double-headed eagle or Saint George slaying a dragon.

Despite their artistic detail, it is uncertain which banners were assigned to each regiment. This is because they were made to the same pattern with several only differing by a slight shade in colour. The Swedes captured many of the flags at the Battle of Narva, which were taken back to Sweden in triumph. They are now kept in the Armémuseum (Swedish Army Museum) in Stockholm.

Source: Wiki / Armémuseum

An infantry regimental banner. It depicts a hand emerging from a cloud holding a sword while it is surrounded by the Russian Order of Saint Andrew on a gold chain

PANZER INVASION

David Willey, Curator of the Tank Museum, reveals the extraordinary story of how outnumbered German armoured forces successfully spearheaded the invasion of France 80 years ago

WORDS TOM GARNER

Source: Wiki / Bundesarchiv, Bild 183-H28708 / CC BY-SA 3.0 DE

Adolf Hitler and his entourage visiting the Eiffel Tower in Paris on 23 June 1940, following the occupation of France by the Nazis

Source: Wiki / Bundesarchiv, Bild 146-1994-036-09A / CC-BY-SA

German soldiers marching past the Arc de Triomphe after the surrender of Paris, 14 June 1940

© Alamy

David Willey is the curator of the Tank Museum and the host of the YouTube series 'Curator at Home'

In May 1940, the world turned upside-down when Nazi Germany launched a campaign in Western Europe against the Low Countries, and most critically, France. Then a major power with a large colonial empire, France had a huge number of armed forces at its disposal. With extensive support from the British Expeditionary Force (BEF) and formidable border defences, it was entirely possible that the Nazis' expansion would be stopped in the West.

Nevertheless, in a brief six-week campaign from 10 May 1940, France, Belgium and the Netherlands fell in one of the most dramatic, audacious campaigns in military history. Characterised by rapid 'blitzkrieg' warfare, the German victory was largely due to how it deployed its armoured forces.

Tanks played a critical role in this campaign, where speed and mobility counted more than armoured engagements. The fall of France in particular was a watershed moment that left Britain almost without allies and destroyed the Third French Republic. In armoured terms, the Germans had achieved this with just a few Panzer divisions, which highlighted the military importance of tanks like never before.

However, the famous images of Panzers rolling through the French countryside towards a seemingly inevitable victory are actually misleading. David Willey, curator of the Tank Museum, explains that Germany's armoured success in France was by no means guaranteed. He discusses how unprepared the German tank force was and why the Panzers' achievements in May 1940 subtly began the process of the Nazis' final defeat.

Development

During the interwar period, Germany underwent a series of programmes to experiment with armour, "Germany had only built 20 tanks during WWI," Willey explains. "Although the tank had not been a massive success, there was a perception in the military that it had partially influenced Germany to sue for an armistice. This had a huge psychological impact, so the commander of the Reichswehr, Hans von Seeckt, started an investigation into why they lost and how they would do it better next time.

"The Germans performed exercises during the 1920s-30s and learned that motorised mechanisation was effective in wargames. Before Hitler came to power, the Germans had experimented with the Russians on secret, tracked vehicles and in 1933 he pushed design work forward."

The manufacture of 'Panzer' (the German word for 'tank') armoured vehicles ensued although they were not a priority for the Nazis' rearmament programme, "The Germans had major problems with their tank development. They were looking at mobile, armoured warfare but it was a tiny part of the greater German military that was forming. For example, Hitler's production priority in October 1939 was ammunition and submarines with tanks only being about third on the list. As a WWI solider, he envisaged the Western campaign as a slog to smash through the Maginot Line and saw artillery ammunition as the priority."

When war broke out, the Panzers were underprepared, "They built many more Panzer Is and IIs than they wanted because the Panzer III and IV were not ready. The Panzer I and II were designed to fight but they were essentially training tanks whereas the Panzer III and IV were definitively built for combat operations." Additionally, the German doctrine for tank warfare was limited, "The tank commanders wanted to expand their Panzer divisions but the kit wasn't available. There was also the wider idea of using the tank as a support weapon for infantry attacks, which was the received wisdom in most European armies."

Despite the limitations, the success of the invasion of Poland encouraged the Germans to turn their attention west.

The Manstein Plan

The initial plan for the invasion of France was called 'Case Yellow', and saw an unimaginative attack with a traditional advance into Belgium, the idea being to capture as much of the Belgian and northern French coast as possible. "It was similar to the weaker 'Schlieffen Plan' of WWI but it was unclear that it would lead to a strategic outcome. Manstein had a very different plan and although the German High Command objected, a meeting was arranged between Manstein and Adolf Hitler. Hitler was captivated and called for a new version of 'Case Yellow'. What became known as the 'Manstein Plan' was a daring idea of speed with Panzers at the forefront.

"In the north, there were 29 divisions of Army Group B that would go into the Low Countries with three Panzer divisions. Below them was Army Group A, which was the more powerful force of 48 divisions, including seven Panzer divisions. Group B would draw the main mobile force of 60 Allied divisions into the Low Countries. Meanwhile, Group A further south would go through the relatively undefended Ardennes with the larger force and only meet 18 French and Belgian divisions."

Once Army Group A had entered France, the Panzers would be critical, "Manstein argued to Hitler that those seven Panzer divisions would go through the Ardennes followed by the infantry. If they then rushed for the coast they could cut off the Allied force moving into Belgium in a massive pocket and potentially gain a strategic outcome. In other words, this was a war-winner rather than just capturing ground and perhaps a negotiated peace deal."

Although Manstein's plan met with enthusiasm from Hitler there were reservations from the German High Command. Ironically, this disagreement aided Manstein's idea, "Hitler bought into the plan and contributed his own thoughts about the Ardennes, which is why the 1940 campaign happened in the way that it did. However, it was risky and the High Command delayed an attack in the West 29 times because they knew they were not ready. This delay worked for the German military because by May 1940 they had assembled hundreds more tanks.

"The tip of the spear"

Despite the audaciousness of Manstein's plan, the German army – and particularly its armoured force – was ill-prepared to invade the West, "When you look at the scale of the German tanks compared to the rest of the German military in 1940, it was tiny – 157 divisions were ready for the invasion but only 16 were motorised and just 10 were Panzer divisions. The nature of the army was also

Source: Wiki / Bundesarchiv, Bild 183-H01757 / CC-BY-SA 3.0

Erich von Manstein's eponymous plan was a daring strategic masterstroke that utilised armoured speed to defeat the Allies in the West

Source: Wiki / PD Gov

As well as commanding German armoured forces through the Ardennes, Heinz Guderian went on to command the 2nd Panzer Army during Operation Barbarossa

Source: Wiki / Bundesarchiv, Bild 146-1970-076-43 / CC-BY-SA 3.0

The invasion of France made the reputation of Erwin Rommel as a formidable commander. He is seen here in the aftermath of the German victory, June 1940

striking; 45 percent of the men were over 40 years old and 50 per cent only had a few weeks training. Fuel was so short that a de-motorisation programme occurred with vehicles being replaced with horses before the attack. The Panzers were regarded as the tip of the spear but many tend to ignore the whole shaft of less mobile troops coming on behind."

The Germans were also outnumbered by the Allies, "There were 135 German divisions earmarked for the invasion against 151 Allied divisions, 117 of which were French. The Allies had double the artillery and 4,204 tanks compared to the Germans who had just over 2,400." They would also have to contend with superior French armour, "The Panzer IV's thickest armour was 30mm compared to the Char B1, which was 60mm. The Char B1 and SOMUA S35 both had 47mm guns that could penetrate 80mm armour at 150 metres. The German tanks were outgunned with the Panzer II only being able to penetrate 64mm at 100 metres."

On the eve of the invasion, the French were in a seemingly better position but had a different attitude towards armoured warfare, "If you lined up the French tanks in terms of quality and numbers they were better than the Germans. The French had endured WWI, were on the winning side and had a formula called 'Methodical Battle'. This meant preparation, simple tactics and great use of artillery. The tank was a weapon of exploitation but artillery came first. Tanks played a small but growing part of their planning. They had also built the Maginot Line so they had a static mentality.

"It was only very late in the 1930s that they started thinking that a mobile, armoured division was sensible. With the French, it's important to consider their mental outlook. When the campaign began they were mentally prepared for a WWI-type encounter. They saw a struggle that would run into months or years ahead but they were preparing for the wrong war. Who could predict the shock German attack of four days breaking through and a six-week campaign compared to four years of what was effectively siege warfare? To us, with hindsight, it seems ridiculous because their strategy failed abysmally but for them and many others it was very sensible at the time."

Invasion

On 10 May 1940, the Germans attacked the Netherlands and Belgium, which prompted a French-British advance into Belgium as had been predicted by Manstein. On 12 May, the first German forces emerged from the Ardennes forest at Sedan in northeast France with the Panzers leading the way. This was a daring success borne from logistical difficulty, "The Panzers' conundrum was how to get through the Ardennes, which is notoriously hilly with tight roads and bends. Their problems came down to, 'If one tank gets stuck, how do we fix that?'"

The breakthrough for the Germans occurred at the Second Battle of Sedan, which was fought on 12-15 May 1940, "Hitler called it a 'miracle' and the Panzers got across the River Meuse where the French defences were not that strong. French forces pulled back from the Meuse even before the tanks had actually crossed. That sense of panic engendered within the French forces caused a swift and massive collapse. The victory at Sedan released the tanks."

"THE PANZERS' OBJECTIVE WAS TO NOW RACE TO THE CHANNEL PORTS ON THE NORTHERN FRENCH COAST, WHICH WAS AN AMBITIOUS MANOEUVRE"

The Panzers' objective was to now race to the Channel ports on the northern French coast, which was an ambitious manoeuvre, "Most Panzer divisions carried up to four days' fuel and their own supplies with them. However, the logistical train was problematic. Fuel was the Panzer's lifeblood because without it a tank was just a pillbox. Heinz Guderian [commander of Army Group A's armoured force] sent out motorcycle combinations ahead to capture petrol stations. They would also round up local Michelin maps so they knew where to go."

Key to the Panzers' speed was operating independently, "The Panzers knew their role was not to support beleaguered infantry units. They needed to be resupplied but the novelty was that they were trying to be independent. Other units were integral such as engineers, artillery and infantry but the Panzers took them along. They were given licence to be untied to the coattails of the army that was advancing at foot pace miles behind them."

This independence was suited to a favourable landscape, "Most of northern France is relatively flat compared to the Ardennes. After gathering fuel, the next important thing was to capture bridges. The Germans followed the Somme valley at one point and river crossings were a problem. Guderian told the troops that you didn't have to repair a bridge or do a river assault if you managed to get there before the French. It was all about speed and momentum."

Adolf Hitler pictured in Paris with Albert Speer (left) and Arno Breker, 23 June 1940. The success of the Panzers during the invasion were assisted by his support of the Manstein Plan

Source: Wiki / PD Gov

This swift advance largely prevented actual tank engagements, “There weren’t that many battles because the Panzer troops were told, ‘If you meet any tanks, go around them’. They were conscious that their own tanks were not of the same quality and used [their] mobility rather than firepower.

“Where they did engage with French armoured forces, such as the Battles of Hannut and Stonne, the Germans didn’t do well because the French tanks were a significant fighting force. However, the French efforts were dissipated and tanks constantly moved about to potential defensive positions. The Germans instead used their speed to rush French positions and were usually successful.”

Guderian, Rommel and De Gaulle

Heinz Guderian and Erwin Rommel became the most famous tank commanders of the invasion. Guderian was a key Panzer commander but Willey argues that his reputation is complicated, “Guderian was the executioner of Manstein’s plan and had great influence on the battle but you have to take his role with a pinch of salt. Manstein was responsible for the strategy but Guderian became a pin-up of the German military. There were other commanders who were just as prominent in terms of 1930s armour development but it was Guderian who wrote his memoirs in which he was a bit self-serving.”

The invasion also made the reputation of Erwin Rommel, commander of 7th Panzer Division, “Like Guderian, Rommel saw the advantage of speed and mobility at ground level because his division were capturing everything without a fight. His tanks drove past French units who were setting up for lunch and didn’t know the Germans were there. At another point, French tanks lined up waiting to refuel before forming a defensive line when the 7th Panzers turned up, completely unexpected.”

Source: Wiki / PD Gallica

Maurice Gamelin was the first commander-in-chief of French forces before he was sacked on 19 May 1940 and replaced by Maxime Weygand

Rommel’s rapport with his troops also increased his popularity, “He was very hands-on with the men and kept up in his half-track and aeroplane. His constant emphasis was to keep moving because he understood Manstein’s strategy. He certainly became the poster-boy for the Nazis after the campaign. Of course, every military force tells white lies to increase their reputation but even without the exaggerations Rommel was a brilliant, armoured general.”

On the other side, French tank commanders like Charles de Gaulle of 4th Armoured Division were given little chance to succeed, “De Gaulle was put in charge of an armoured force south of the German breakthrough. He attempted an attack as part of a larger pincer movement but it was aborted and didn’t happen in the way he wanted. He had the problem of the cascading effect of failure and confusion from the French High Command. Although De Gaulle didn’t come out badly, he didn’t have much opportunity to shine.”

An extended tortoise

The tragedy for France was that the courage of its soldiers was not matched by their High Command, “There is a lot of nonsense about French soldiers being cowards or crass jokes that their tanks had five reverse gears. The French were really let down by their command. Where they could fight, they fought supremely bravely. You only have to go on battlefield tours to find pillboxes around Sedan etc. They invariably have plaques that commemorate soldiers who fought until they ran out of ammunition and were killed. That lie about their courage shouldn’t be allowed.”

One example of the French High Command’s failure was a missed opportunity to cut off the Panzer advance, “The Panzers made it to the coast on 19 May. The northern Allied armies were now in a pocket about 200 kilometres long and 140 kilometres deep against the coast. As early as 15 May, the French Prime Minister, Paul Reynaud, told Winston Churchill, ‘We are defeated’. However, on 19 May, Churchill pointed out to the French Commander-in-Chief, Maurice Gamelin, ‘The tortoise has extended its head’. In other words, the Allies could cut off the Panzer advance on the coast and cause real problems with a pincer attack.”

German tanks enter a ruined French town, June 1940

© Getty

Source: Wiki / PD Gov

Although Charles de Gaulle was given little chance to prove his worth as a tank commander, he swiftly found a new role as the leader of Free French forces

Bundesarchiv, Bild 101I-769-0229-12A / Borchert, Erich (Ehic) / CC-BY-SA 3.0

Guderian is pictured directing armoured operations from a half-track, May 1940

Source: Wiki / PD Gov

German general Walther von Reichenau inspects a Char B1, June 1940

Gamelin followed this advice but the Allied plan was internally thwarted, "Gamelin issued 'Directive Number 12' on 19 May for an Allied pinch attack. However, he was sacked that day and replaced by Maxime Weygand who cancelled it. Weygand then wasted three days by visiting politicians, conducting a fact-finding mission and flying into the Allied pocket to have discussions with 1st Army Group commander Gaston Billotte. He had to fly back via a tortuous route and achieved nothing."

Billotte was killed in a car crash on 21 May while Weygand belatedly reinstated Directive Number 12 before finally cancelling it on 27 May. Willey is critical of how a potentially good idea to stop the Panzers was squandered, "The idea of a major pinching-off attack was there but mistakes occurred in so many different ways that it led to a wasted opportunity. This paralysis, lack of leadership and failure to understand at the top reflects the WWI thinking. Weygand thought he had time but he hadn't. It's very problematic because so many French soldiers were bravely doing exactly what they were told and getting massacred."

During this crisis and with Manstein's plan succeeding in trapping the Allies, the BEF took matters into its own hands. During 23-24 May, its commander, Lord Gort, decided to abandon the British role in an Anglo-French counter-attack. The priority became evacuating the BEF and as many French and Belgian units as possible by sea. The resulting Operation Dynamo lifted 338,000 troops, primarily from Dunkirk. This saved the BEF but was largely

"24 Hours That Saved Europe"

The Battle of Arras was a forgotten tank engagement that inadvertently changed the course of WWII

As German forces rapidly advanced, the British-held supply base at Arras was in danger of being surrounded. On 21 May 1940 the British launched a counter-attack with just 2,000 infantrymen and 74 tanks. David Willey explains, "General Harold Franklyn was in charge when Rommel's 7th Panzer Division passed south of Arras. He was ordered by Lord Gort to cut off the German advance to give Arras breathing space. Most of the British forces were in Belgium and they couldn't risk a major rear base being cut off. Franklyn ordered an attack with his available forces. British tanks in Belgium were rushed back.

"Tanks were usually transported by train but they had to drive back. They were worn out when they arrived on the night of 20 May below Vimy Ridge. Giffard le Quesne Martel was put in charge with soldiers from the Durham Light Infantry who were put in a battalion each with the 4th and 7th Royal Tank Regiments. He also had artillery and anti-tank guns to make a two-pronged attack across the 7th Panzers' line. There was no time for prior reconnaissance or even an orders group. It was very ad-hoc but it was inevitable because of the situation."

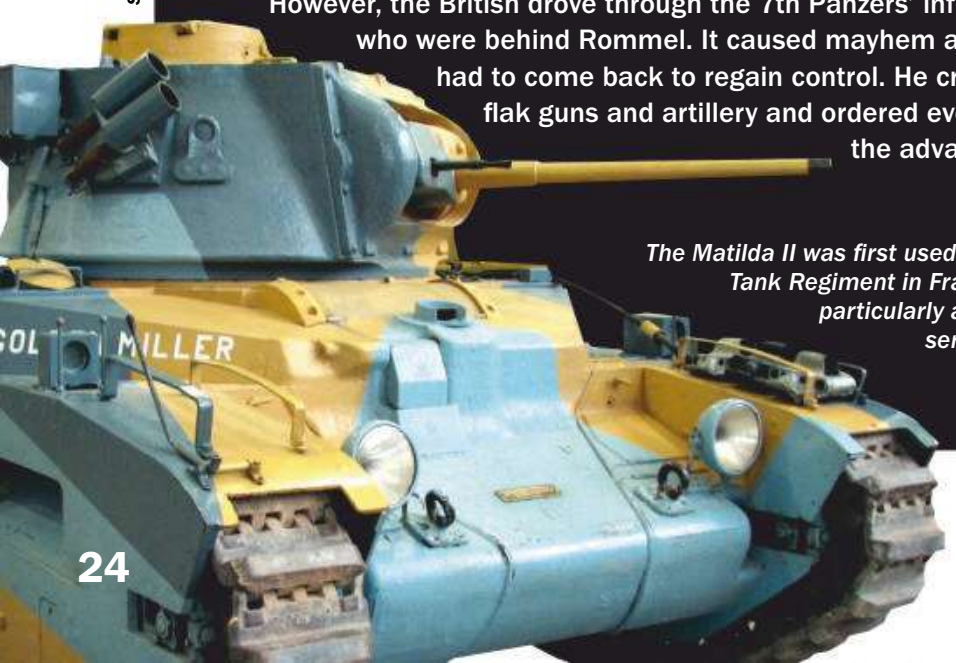
Primarily using Matilda tanks, the British ran into the Germans, "The nearby French tried to help but they accidentally fired on their allies. However, the British drove through the 7th Panzers' infantry regiment who were behind Rommel. It caused mayhem and Rommel had to come back to regain control. He created a line of flak guns and artillery and ordered everything fire at the advancing British."

The British also startled an SS division, "The Matildas had thick armour so the standard German anti-tank rounds bounced off. The battle really had an effect because the British got through the Panzers. They then encountered the Totenkopf SS Division, which was passing further south. The SS fled and later the Wehrmacht gleefully reported how they panicked. The initial success of the attack was a moment of elation for the British."

The success didn't last, "They then came against better defended German gun lines set up by Rommel and only 20 British tanks of 80 made it back. By the end of the day, as the British retreated back towards Vimy Ridge, Rommel called in the Stukas." Nevertheless, the attack sent shockwaves up the chain of command, "Rommel had radioed back saying they were attacked by hundreds of tanks and Hitler feared that they would be cut off and lose at the last moment. Ewald von Kleist called the Arras attack "a serious threat" and Hitler ordered Wilhelm Keitel to the front and halt the Panzers for 24 hours on 22 May."

Willey believes the Battle of Arras had profound implications, "It was so strategically important that one historian described it as, '24 hours that saved Europe'. The Panzers were on target to capture the Channel ports but because of the 24-hour delay they couldn't move until midnight on 22 May. In that time, the British reinforced three ports. Boulogne and Calais fell in a few days but Dunkirk was held until the 4 June and that of course was so significant. Because Dunkirk was held, 338,000 men were evacuated.

"That ill-planned little attack by British tanks really did save Europe. I bet none of the blokes knew the significance of their action back then. The Allies would have lost those ports overnight if the Panzers had carried on and think what Churchill would have had to do? Many speculate that he would have had to sue for some kind of peace. In their official history of the campaign written in the 1980s, the Germans emphasised Hitler's decision to halt the Panzers. The reinforced ports, particularly Dunkirk, allowed the British to fight another day and ultimately to success in WWII as opposed to being defeated in 1940."



Source: Wiki / PD Hohum

The Matilda II was first used by the 7th Royal Tank Regiment in France but became particularly associated for its service in the North Africa Campaign

regarded as a betrayal by the French. With the fall of the Channel ports, the Germans struck south from the River Somme and despite brave resistance from the French and the remaining British forces, capitulation became inevitable. Paris was captured on 14 June, which was little more than a month after the German invasion began. Like the race to the coast, the Panzers sped across France to mop up pockets of resistance and France surrendered on 22 June.

"The seeds of failure"

The sudden fall of France ripped up the balance of power in Europe with the country being divided between the Nazis and the puppet Vichy government for the next four years. In a few weeks, the Germans had used armour and mobility to neutralise a great power and severely weakened Britain's military capability.

Panzers had played an important part although Willey is keen to stress that the role of propaganda was just as important, "This warfare wasn't unique to the Germans but they achieved an amazing strategic outcome in France that showed the potential of armoured forces. However, we have almost accepted Joseph Goebbels's propaganda that the Germans were planning this for ages and that blitzkrieg was not a gamble but a mighty force unleashed.

"Goebbels promoted that idea with lots of footage of tanks racing past with Stuka dive bombers overhead. In the newsreels, it's very hard to see the horse-drawn units that came later. It was all shot from the front end and so, in a sense, we are repeating his propaganda if we still emphasise the 'might' of the German army. It wasn't the case because it was how the Germans 'used' their forces that led to the victory. It's very hard to change that old perspective."

Perhaps the most complex legacy was the contribution of Hitler to the German success, "Hitler and the High Command all had worries about letting the tanks go. They were nervous of their own success and amazed at the victory. However, there are no two ways about it – if Hitler said something, then it happened.

"At the outbreak of the war the German High Command thought, 'He's dropped us in it'. However, when they won in France it was very hard to argue with Hitler because he backed the Manstein Plan against their advice. It had worked and the victory was his. It was Hitler who then demanded an 88mm gun on a tank, which led to the Tiger programme. The German military were not interested in super-heavy tanks at all – it was because Hitler ordered it. He became influential on German tank design to a degree that Churchill would never have done."

Nevertheless, Willey believes that the Panzers' achievements were also the root cause of Hitler's defeat, "The irony is that his nervousness about victory led to, what seemed at the time, minor failings. He stopped the tanks for 24 hours after Arras, which gave the British an advantage. You can step back and say that he basically let the British get away. This saved the BEF, strengthened Churchill's resolve and ultimately ruined Hitler's plans."

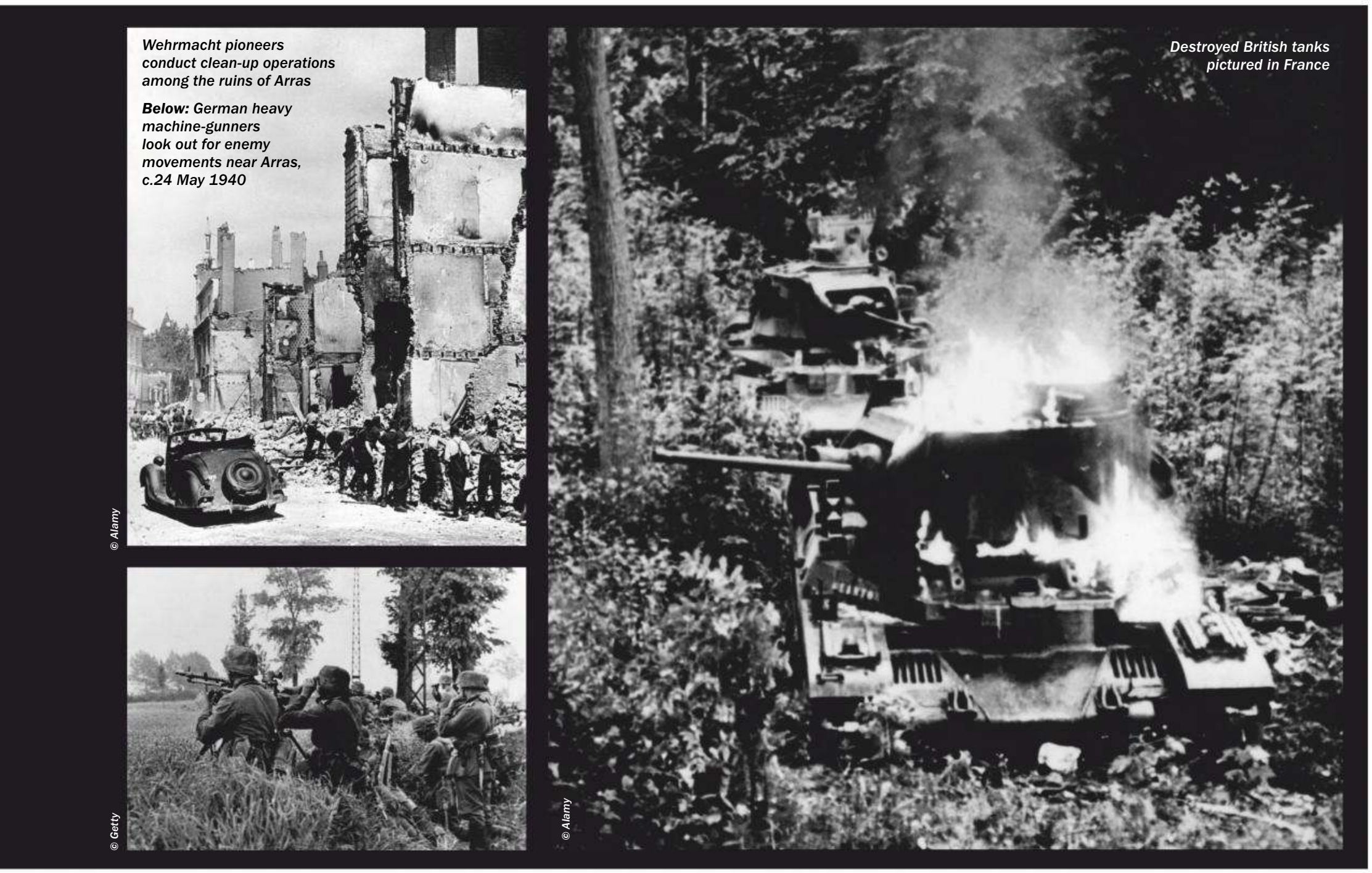
This mistake seemed minimal in 1940 but conversely, the armoured success made Hitler overconfident, "He developed an omnipotent belief in his own decisions that led to the invasion of Russia and declaring war on America. This was Hitler's megalomania but the German military were not in a position to argue. Because they had been so successful in France they went onto the next phase by turning east with the same Panzer advances and encirclements.

"However, that lightning warfare couldn't work with Russia's geographical size. Therefore, at the height of his success in France, Hitler had introduced the little seeds of his failure."

THE TANK MUSEUM

The Tank Museum in Dorset, England, is the largest collection of tanks in the world along with the third-largest collection of armoured vehicles. Due to the Covid-19 pandemic it is currently increasing its internet presence with video lectures, reviews, competitions and resources.

For more information visit: www.tankmuseum.org



Wehrmacht pioneers conduct clean-up operations among the ruins of Arras

***Below:** German heavy machine-gunners look out for enemy movements near Arras, c.24 May 1940*

Destroyed British tanks pictured in France

© Alamy © Getty © Alamy

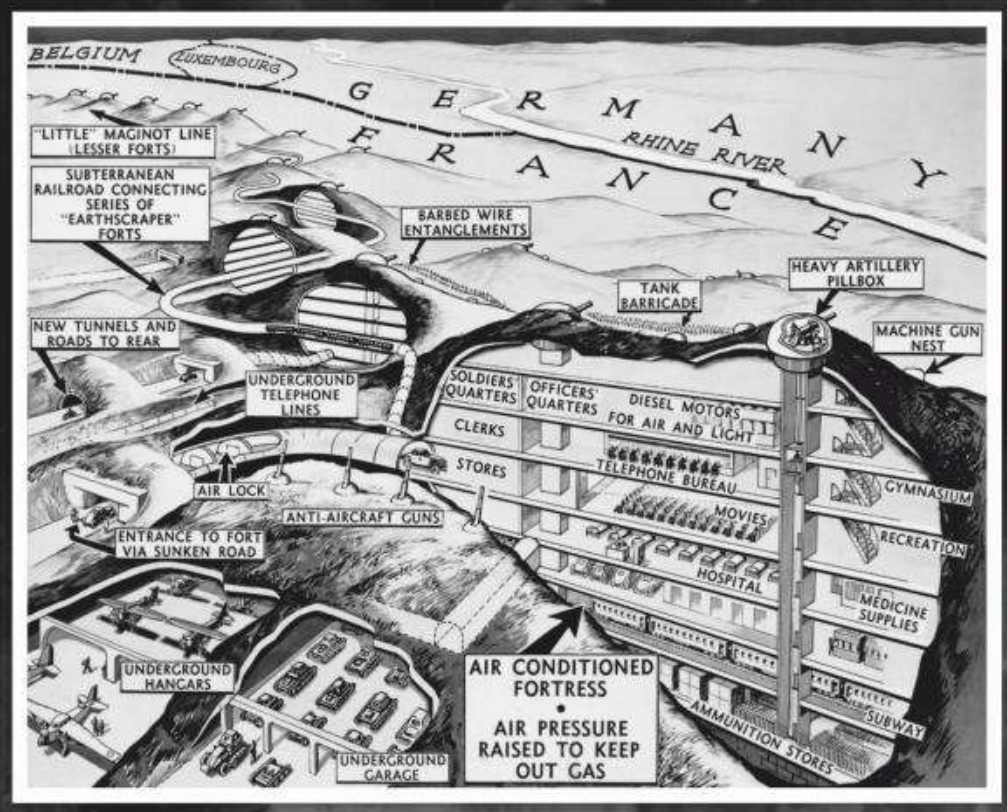
The Maginot Line

The French built a huge system of technically impregnable fortifications along the majority of its borders that German forces famously avoided

One of the most formidable military projects in history, the Maginot Line was designed to prevent a repeat of the carnage of WWI, let alone a German conquest of France. A series of concrete fortifications, obstacles and weapon installations, the Line was constructed during 1929-38 and named after André Maginot, the French Minister of War (1929-31).

Constructed on the French side of its borders with Germany, Luxembourg, Switzerland and Italy, the Line was impervious to most forms of attack, including tank fire and aerial bombings. Its statistics were remarkable with a length that was hundreds of miles long and costing the French government 3.3 billion Francs to build. It consisted of 142 bunkers, 352 casemates and 5,000 blockhouses. Around 1.5 million cubic metres of concrete and 150,000 tons of steel were used and at its broadest the line was over 16 miles deep. It also contained booby traps such as minefields, hidden gun nests, dams and levees to open in an emergency and thin rear defences so that it could be easily retaken by French forces.

The Maginot Line became the pride of France but it did not extend along the Belgian border (particularly near the Ardennes forest) to the English Channel. This proved to be an infamous flaw when the Germans simply outflanked it in May 1940. In armoured terms there was a logical reason for this as David Willey explains, "A Panzer attack would have failed because they were not of an armoured quality that could withstand all those emplaced guns. Also, when you attack you also want numerical advantage but that wouldn't have happened if they had gone against the Maginot Line in the same way. They would have been playing into the French hands for a long-term war and that was not in their interests."



A cartoon from 1940 of the elaborate subterranean installations within the Maginot Line. This included hospitals, telephone exchanges, elevators and underground railways

© Alamy

"THE LINE WAS IMPERVIOUS TO MOST FORMS OF ATTACK, INCLUDING TANK FIRE AND AERIAL BOMBINGS"

Source: Wiki / PD Gov

American soldiers examine Block 13, Hochwald West Fortress on the Maginot Line in 1944. The Germans had actually used the Maginot Line's defences to bombard the US 3rd Army

PANZER II

The forgotten star of Germany's victories

Tank expert and veteran Richard Cutland discusses how this 'unsung light tank' was the most numerous and successful armoured German vehicle in May 1940

Richard Cutland's operational experience in tanks includes the Gulf and Iraq Wars as well as teaching armoured tactics in the British Army

Panzers were the striking heart of Germany's battle tanks during WWII. The most famous variants were the medium Panzer III and IV tanks that have dominated perceptions of German armoured warfare. However, the most numerous German tank in May 1940 was their lighter predecessor – the Panzer II. Although it was less powerful and memorable than its successors it was still a highly successful tank.

Richard Cutland is the head of Military Relations Europe for Wargaming and served in the British Royal Tank Regiment for 30 years. He discusses the origins of the Panzer II, its importance during the invasion of France and why it has been neglected by tank historians.

How was the Panzer II developed?

The Panzer I was the starting block for the Panzer II. It was initially designed as a fighting tank but, more critically, as a vehicle that could give the Germans experience of armoured vehicles. At this stage, they were already on the Panzer III and IV. The Panzer II was developed as an interim vehicle. This had to act as an infantry support vehicle, be proofed against small-arms fire, be able to cross battlefields and conduct independent operations. The Panzer I met these criteria but the Panzer II was the natural progression.

To what extent was the Panzer II an improvement on the Panzer I?

Unlike the Panzer I, the Panzer II was always

Source: Wiki / Creative Commons PD

***Above:** A Panzer II Ausf C at the Musée des Blindés, Saumur, France*

Source: Wiki / Creative Commons PD

A Panzer II Ausf F. This variant was constructed between 1941-42 and was the final major version of the tank

intended to be used in combat but not to the extent that it actually was. The Panzer I was really intended as a training vehicle and had very poor armour. The Panzer II was much larger and more heavily armoured but was still categorised as a light tank. However, it became the mainstay of the Panzer divisions for the first few years of the war.

What were the Panzer II's specifications?
It carried a 20mm KwK L/55 gun, which was basically a converted a converted Flak 30 anti-aircraft gun, and one machine-gun. It weighed about ten tons with a top speed of around 25mph. It also had a three-man crew of a driver, commander-gunner and loader-radio operator.

What were its strengths and weaknesses?
For its strengths, the Panzer II had a low profile, which made it a small target. It was incredibly manoeuvrable and had a potent gun against lightly-armoured vehicles and infantry. However, by early 1942 it was outgunned by the majority and quality of the British and Soviet tanks. The Panzer II Ausf F had to be introduced, which was equipped with a larger gun and thicker armour. Its performance in North Africa and Russia was not particularly good, largely because its engine couldn't cope with the increased weight.

"THE PANZER II COULD RUSH ALLIED TANKS LIKE A SWARM OF WASPS. ONE TANK MAY NOT BE PARTICULARLY STRONG BUT IF YOU HAD 12-20 COMING TOGETHER, THE PANZER II COULD WORK FORMIDABLY WITH ITS STRENGTH LYING IN NUMBERS"

What was the Panzer II's operational history before May 1940?
During 1936-39, production gradually increased and they were used for training. Its first real war operation came with the annexation of Czechoslovakia but that happened almost without a fight. Its most serious operation before France was the invasion of Poland. The Panzer II was the most numerous model in the Wehrmacht. There are differing numbers as to how many were used but possibly 1,223 were used in Poland. The records show that it was efficient against lightly protected Polish tanks. However, many were destroyed by Polish anti-tank rifles and a lot were also destroyed at the Battle of Warsaw. The German military became concerned and recommended that the Panzer II be withdrawn as a front line tank.

How did it become the most numerous tank in the German forces during May 1940?
It was purely because nothing else was ready at that stage. Germany was at a blitzkrieg peak against France and the Panzer II was quickly put into service. It was a good, efficient vehicle but the problem was that it wasn't up to the tank standards of the Allies. However, the Germans used the Panzer II well because they were highly trained.

Were there any notable engagements with the French during the invasion?
It's very hard to find operational records where they purely refer to the Panzer II. This is partially because at stages there was a mix of the Panzer II, III and IV. In the heat of a campaign, I don't think anybody was too concerned between the Panzer models. Most reports just refer to 'the Panzer' of which there were many variants. The Panzer II made up 36-40 percent of the invading armoured force but would have been little or no use in a clash

© Getty

***Above:** Adolf Hitler inspects a destroyed French tank after the campaign*

Source: Wiki / Creative Commons PD

***Above, right:** The Char B1 was a powerful opponent of the Panzer II. Some captured models were used by the Germans on the Eastern Front while others were recaptured and used by Free French and resistance forces from 1944*

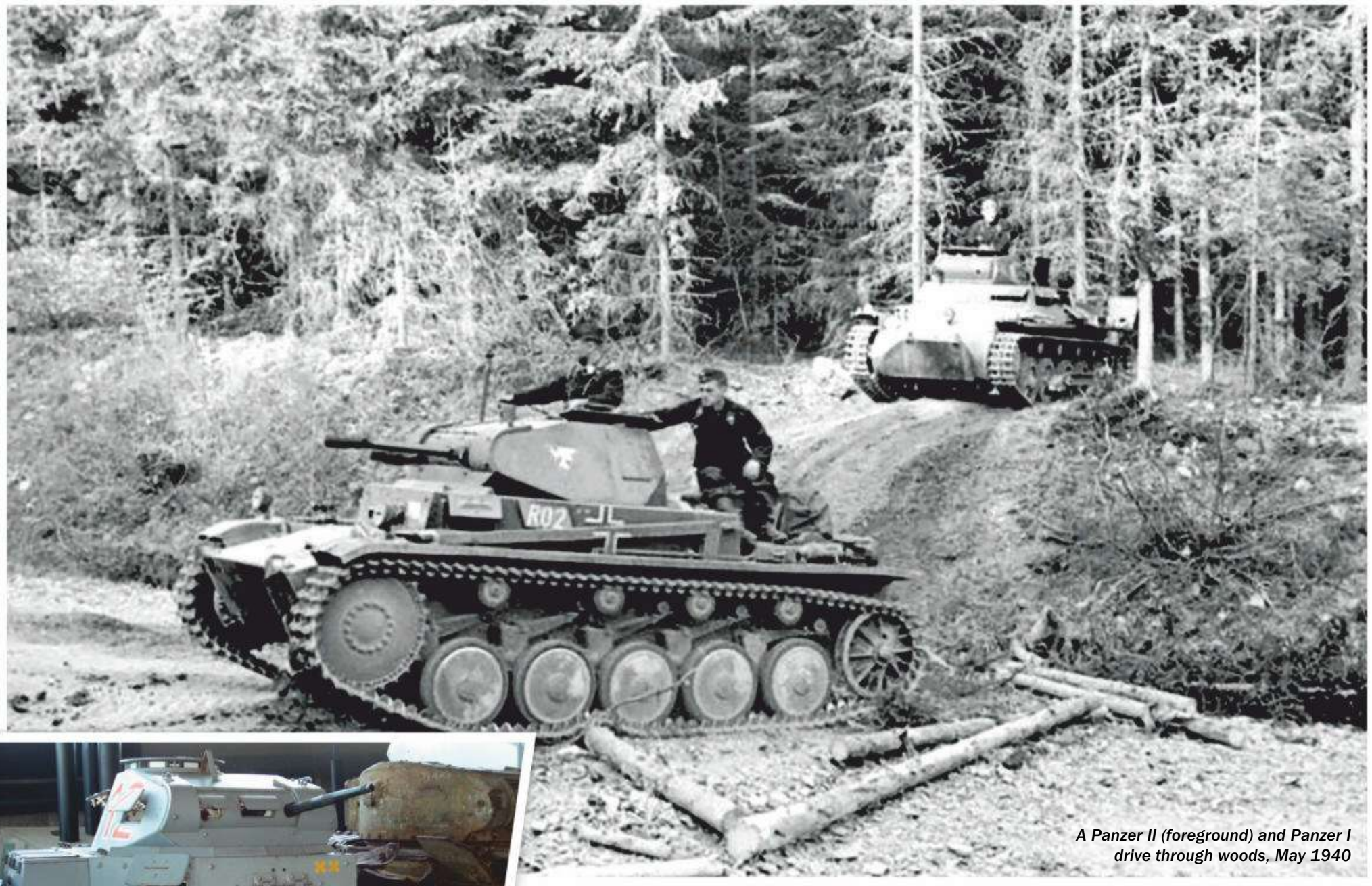
A Panzer II crosses a steep slope under fire during the campaign

© Getty

A Panzer fires against a French anti-tank position

"WHAT IS CLEAR ABOUT THE PANZER II IS THAT THE GERMANS WON MOST OF THEIR SIGNIFICANT VICTORIES WITH THIS GENERALLY UNSUNG LIGHT TANK"

© Getty



A Panzer II (foreground) and Panzer I drive through woods, May 1940

Source: Wiki / PD Gov

Source: Wiki / Creative Commons PD

A Panzer II Ausf C of 6th Panzer Division on display at the Canadian War Museum, Ottawa

against the British or French tanks. However, the German plan was that their tanks would work together on the battlefield and rush the enemy. It was hard for any tank to destroy a static armoured vehicle so they utilised their mobility. The Panzer II could rush Allied tanks like a swarm of wasps. One tank may not be particularly strong but if you had 12-20 coming together, the Panzer II could work formidably with its strength lying in numbers.

How did the Panzer II compare to the French Char B1?

The Char B1 was a formidable monster of a vehicle and incredibly well powered. In May 1940, a Char B1 called 'Eure' deliberately drove into a German ambush and destroyed 13 tanks during the Battle of Stonne. The operational report doesn't make it clear whether those tanks were Panzer IIs, IIIs or IVs – it could have been a mixture of all of those. Nevertheless, it emphasised how much better the Allied tanks were in terms of armament and firepower than the Panzer IIs.

There was also a drawback. The Char B1 was an amazing tank but it was expensive to build and very heavy on fuel. The logistical chain for it was so difficult that it wasn't put into battle very often because there wasn't enough fuel so the French had to be very careful.

To what extent did the Panzer II contribute to the German victory in France?

It's a combination of the slow development of the Panzer III and IV and the unexpectedly rapid expansion of Panzer forces from 1936. This meant that the Panzer II was the most important tank at the beginning of WWII. It was still the most numerous at the start of the Western offensive in May 1940. It contributed significantly to the German victory because it was the most deployed vehicle. Regardless of how useful it was it still did its job and did it very well.

How much has the Panzer II's reputation been neglected compared to its more famous successors?

Its reputation has been completely neglected. Conversely, most of their defeats came from the more famous, heavier tanks, which are the ones people hear about.

The simple answer is that it was not a particularly exciting vehicle when you compare it to the likes of the Tiger tanks etc. However, it was a critical starting block for everything. It passed through the annals of tank history and development pretty much unknown but it was a great vehicle for what it was used for.

WORLD OF TANKS

World of Tanks is an online multiplayer tank battles simulator from Wargaming that features mid-20th century combat vehicles. It is free to play with additional premium options.

To play and for more information visit: www.worldoftanks.eu

FREE TANK!

World of Tanks is also providing a free giveaway tank for the game. Use the code "1TANKIE" to get access to a free starter kit of a Matilda BP premium tank as well as seven days of a *World of Tanks* premium account. The offer is valid for new players only and for all global regions except Russia. Languages for the game are geographically-based and localised in English, French, Polish, Spanish, Italian, Czech and German. To access this offer visit: www.worldoftanks.eu/tankie

EMAEL FORTRESS

FIRST STRIKE OF THE FALLSCHIRMJAGER

WORDS **CRAIG MOORE**

Most people know about the successful use of gliders and paratroopers at Pegasus Bridge on D-Day in Normandy, and later during the attack at Arnhem as part of Operation Market Garden, the bridge too far. Less well-known is the first use of gliders in combat, in the 1940 attack on Belgium's border stronghold

German paratroopers after the final surrender of the Eben-Emael fortress

On the 10 May 1940, the Germans commenced their attack on the Netherlands, Belgium and France. The main thrust of the attack was going to come through the Belgium Ardennes and head towards the French coast. The Germans wanted to trick the Allies into concentrating their forces in northern France and Belgium. The 3rd and 4th Panzer Divisions were given the task of being the spearhead of the faint by crossing the Dutch and Belgian borders near the city of Maastricht and driving on to the Gembloux Gap, southeast of Brussels.

The incredibly deep and wide Albert Canal was built in the early 1930s. The Belgian builders hacked through sandstone hills and left very steep cliffs on each side of the canal. In this area, the border with the Netherlands is effectively the Albert Canal. The Germans needed to capture the four bridges that spanned this waterway if their attack were to succeed. The problem was the Belgium army had built a massive fortress inside a hill at Eben-Emael, south of Maastricht. The tunnel from the main gate to the furthest outpost was over five kilometres long. The fort's 75mm and 120mm howitzers could bombard all four bridges. Every approach to the fortress was covered by machine-guns and howitzers that could fire high explosive fragmentation shells.

On the top of the fortress, there were four large concrete gun emplacements each armed with three 75mm howitzers. The two that faced northwards were given the designations Maastricht One, Maastricht Two. The two that faced to the south were known as Visé One and Visé Two. Two retractable rotating turrets each armed with two 75mm rapid-fire guns were constructed in the southern section of the fortress roof. In the centre there was a large thickly armoured revolving cupola that housed two 120mm guns. These were all intended to be used in an offensive role.

Seven blockhouses had been constructed to defend the fortress. Each one was armed with machine-guns, grenade throwers, observation cupola, searchlights, and one or two 60mm anti-tank guns. Dummy domed cupolas were placed on the roof of the Fortress to confuse the enemy and moved regularly.

The plan

The Germans realised that a conventional attack would fail. A surprise airborne assault on each bridge and the top of the fortress, coordinated to commence at the same time, was the only way to solve the problem. The terms of the Versailles Treaty after World War I had prohibited Germany from the rearming and rebuilding an air force, but it did not prevent training pilots to fly gliders.

The main entrance to Eben-Emael fortress. The M41 Walker Bulldog tank is a latter addition

© Craig Moore

Unmarked German DFS 230 assault gliders landed on the roof of the Eben-Emael fortress 10 May 1940

© Patrick Leenders

© Getty

A special assault detachment was organised under the command of Hauptmann Walter Koch, called Sturmabteilung Koch (Koch Assault Battalion). German paratroopers (Fallschirm-Jäger) and engineers were to be landed by glider to attack the Eben-Emael fortress and secure the three bridges northwest of it in a surprise attack.

The attack

On 10 May 1940 at 3.15am the 11 DFS 230, 10-seat, 36 foot long, tactical assault gliders towed by Junker 52 transport planes took off from Ostheim airport. After a flight lasting only half an hour, the gliders were released, so they could silently bear down on their target. Three other groups of gliders took off at the same time to attack the three northern bridges over the Albert Canal. The German attack force Sturmgruppe Granit was given the task of attacking the Eben-Emael fortress. It comprised

"WITHIN AN HOUR OF THE FIRST GLIDER LANDING, MOST OF THE OBJECTIVES HAD BEEN TAKEN BY STURMABTEILUNG KOCH"

of the two officers and 84 men under the command of Oberleutnant Rudolf Witzig. The engineer platoon and their bulky equipment were to land with the attack. Two of the gliders were forced to land because of technical problems, before reaching the target. One was carrying the commanding officer Oberleutnant Witzig.

Before the war, civilian Lufthansa aircraft crew had photographed the fortifications. Each glider attack team was tasked with neutralising specific gun emplacements or observation posts. At 4.05am the fortress's anti-aircraft defence team spotted the gliders. To add an element of confusion, the gliders had their nationality markings obliterated. The defenders did not open fire until 4.20am just as the gliders were landing on top of the fortress. The pilots landed as close to their objectives as possible. Within seconds of touching down, the paratroopers scrambled out of their gliders and ran towards their targets.

The men from Glider No.1 attached a 50kg hollow shaped charge on top of the Maastricht Two gun emplacement observation dome. The massive explosion instantly killed René Marchoul and Martin David. The paratroopers then hurled grenades down the shaft, killing two more Belgium soldiers. Survivors barricaded the entrance to the shaft. They also placed a 12.5kg charge on the barrel of one of the 75mm guns. The blast propelled it back into the casement killing Jean Verbois who was one of the Belgian gun crew.

© Craig Moore

On the Eben-Emael fortress roof there was a revolving heavily armoured cupola with two 120 artillery howitzers

© Craig Moore

The Eben-Emael fortress had four gun emplacements that housed three 75mm artillery howitzers

© Craig Moore

This armoured observation dome was destroyed by the German attack force detonating a shaped charge on top

© Craig Moore

The main gate was protected by machine-guns, grenade throwers, observation cupola, searchlights, and an anti-tank gun

© Craig Moore

One of the many long corridors inside Eben-Emael fortress. Some are over five kilometres long

© Craig Moore

The fortress was protected by blockhouses armed with many weapons and searchlights

The roof of Eben-Emael fortress next to the Albert Canal with German DFS 230 assault gliders in the northern section

© Patrick Leenders

© Alamy

A German DFS 230 assault glider next to a Belgium anti-aircraft defence position on the roof of Eben-Emael fortress

© Patrick Leenders

© Craig Moore

Junkers 52 transport aircraft towed DFS 230 assault gliders. It is on display at the Royal Military History Museum in Brussels, Belgium

© Craig Moore

German 50kg shaped charge and paratrooper (Fallschirm-Jäger) uniform

Paratroopers in Glider No.3 destroyed one of the three 75mm guns in the embrasure called Maastricht One, with a 12.5kg charge killing one Belgium soldier, Lambert Bormans, and knocking out the lights inside the shaft. They used a 50kg charge to put the other two 75mm guns out of action.

Glider No.4 slid to a halt 100 yards short of its objective due to being snared in barbed wire. Belgium gun crews were not manning their weapons and the paratroopers ran to the blockhouse without being fired upon. A 1kg charge was thrown through the observation dome vision port followed by the detonation of a 50kg charge on top of the dome. As one of the machine-gun embrasures opened fire a 12.5kg charge exploded killing the Belgian gun crew.

Paratroopers in Glider No.5 attacked the Visé One gun emplacement. They used explosives to destroy the ventilators which left the Belgium gun crews struggling for air and forced to withdraw. The German paratroopers then turned their attention to the defensive gun emplacement called Block II. What they didn't realise was that Belgium soldiers had returned to the Visé One gun emplacement until they came under fire. This part of the battle went on until 9.00am and was temporarily stopped by the detonation of a 1kg German charge near the guns. An hour later the tenacious Belgian gun crew returned and found that two of the 75mm guns were still in working condition. The crews fired high explosive fragmentation shells with short fuses designed to explode

"AN EXPLOSION CAUSED SEVERAL BARRELS OF CHLORIDE CLEANING POWDER TO BURST OPEN INSIDE THE FORTRESS, WHICH MADE THE DEFENDERS BELIEVE THE GERMANS WERE USING CHEMICAL WEAPONS"

a few metres past the end of the gun barrel. The Glider No.9 paratroopers came under machine-gun fire as they attacked the defensive casemate Mi-Sud. The Germans responded by using a flamethrower and explosive charges on the gun embrasure and observation dome. A 50kg charge was used to blow a hole in the entrance.

The job of blowing up the large twin 120mm gun and cupola was given to the paratroopers of Glider No.10. The armour was so thick that the 50kg charge failed to penetrate it. The attackers then stuffed 1kg charges into the two barrels. The explosions rendered the guns unusable.

Within an hour of the first glider landing, most of the objectives had been taken by Sturmabteilung Koch. The observation posts had been destroyed, and the offensive artillery system covering the northern bridges was inoperable.

The Belgian High Command instructed artillery guns in nearby fortresses to commence bombarding the roof of the Eben-Emal fortress to try and dislodge the paratroopers. The artillery bombardment forced the Germans to seek shelter and continue their attack inside the fortress. The Germans took up defensive positions in the north section. They continued their demolition work using 50kg charges throughout the night. Small groups of Belgium soldiers climbed up the outside of the fortress and tried to extricate the Germans. They tried again the following day. The Luftwaffe strafed and bombed the attacking Belgian infantry. These counter-attacks were not successful. The gun emplacements and cupolas in the south of the fortress were still in Belgium control. They continued to fire on any enemy troops they saw. These Belgium gun crews remained in their posts until the fortress surrendered.

In the early hours of 11 May 1940, having crossed the Albert Canal in rubber boats under fire from the fortress, a German ground relief force arrived at the fortress and linked up with men from the gliders. An explosion caused several barrels of chloride cleaning powder to burst open inside the fortress, which made the defenders believe that the Germans were using chemical weapons.

Just after noon 11 May 1940, the Belgium garrison surrendered. They had 23 dead and 59 wounded. The German glider force suffered 6 killed and 15 wounded. The relief force sustained 62 dead and 61 wounded soldiers.

CORGI®

THE AVIATION ARCHIVE

RED BARON
MANFRED VON RICHTHOFEN 1892-1918

The Red Baron's Reign is Over

AA38110 Sopwith Camel F.1. D3326, Lt. Wilfred Reid 'Wop' May, RAF No.209 Squadron, Bertangles, France, 21st April 1918, Death of the Red Baron

Scale 1:48 I Lengh 178mm

AA38310 Fokker Dr.I Triplane 161/17, Wolfram Freiherr von Richthofen, Jasta 11, JG.1, Cappy aerodrome, France, 21st April 1918, Death of the Red Baron

Scale 1:48 I Lengh 151mm

AS HE PREPARED FOR HIS FIRST COMBAT PATROL, NOVICE FIGHTER PILOT WOLFRAM von Richthofen was keen to impress his famous cousin, the famed *'Red Baron'* and the flight leader for the mission. Although suffering from fatigue and combat stress, Manfred von Richthofen was the consummate professional and the safety of his fellow airmen was of paramount importance to him. As the Fokker Dr.I fighters of Jasta 11 climbed away from Cappy aerodrome on 21st April 1918, Wolfram had been given strict instructions to stay out of trouble should the formation encounter the enemy, staying on the periphery of the action and experiencing what the melee of a dogfight looked like. As his comrades later engaged in combat with the Sopwith Camels of RAF No.209 Squadron, Wolfram did as instructed, but found himself under attack by one of the Camels, which had also been loitering on the edge of the fighting, an aircraft which was flown by the similarly inexperienced Wilfred 'Wop' May. Taking immediate evasive action, the Camel sped past his Triplane, with the incident attracting the attention of his famous cousin – Manfred von Richthofen pursued the Camel which seemed destined to become his 81st victim. Wolfram von Richthofen would survive the encounter to become a fighter ace in his own right, however, this meeting of two novice pilots over the trenches of the Western Front would ultimately claim the life of the world's most famous airman.

To order call 01843 233 502

(Telephone order lines are open 9am-5pm Monday to Thursday and 9am-3pm on Friday)

www.corgi.co.uk or visit your local Corgi stockist!

YouTube /officialcorgi @corgi /corgidiecast

BATTLE OF LEUTHEN

Prussian and Austrian forces clash in battle over Silesia, a historical region of Central Europe

WORDS **WILLIAM E WELSH**

The blue-coated Prussian soldiers marched south over hard frozen ground blanketed with a light dusting of snow towards the nondescript village of Sagschutz, at midday on 5 September 1757. A string of low hills masked their march from the watchful eyes of their Austrian foe arrayed for battle less than two miles to the west.

Prussian King Frederick II 'The Great' believed his army had a strong chance for success in the coming battle that would decide whether Prussia retained Silesia or lost it to the Austrians. He intended to send his well-trained infantry against the Austrian flank in what was known in military lexicon as an 'oblique order of attack.' Simply put, the Prussians would advance diagonally against the southern end of the Austrian line.

When Frederick had completed making his final adjustments for attack at 1.15pm, he rode over to two corporals who would be the ones to carry the colours into battle for the first battalion of the 26th Infantry Regiment. Frederick wanted to make sure they knew exactly where to lead their battalion. The 45-year-old Prussian king told them to march straight towards the enemy whose troops were on a low rise a short distance to the northeast. It was imperative that the three battalions spearheading the attack drive the enemy from its position at all costs, he told them.

LEUTHEN, PRUSSIAN SILESIA 5 DECEMBER 1757

OPPOSING FORCES

PRUSSIAN

LEADER
Frederick the Great

INFANTRY
29,900

CAVALRY
9,800

ARTILLERY
170 guns

VS

AUSTRIAN

LEADER
Charles of Lorraine

INFANTRY
41,000

CAVALRY
22,000

ARTILLERY
210 guns

"YOU'VE GOT THE ENEMY IN FRONT, AND ALL OUR ARMY BEHIND. THERE IS NO SPACE TO RETREAT, AND THE ONLY WAY TO GO FORWARD IS TO BEAT THE ENEMY!"

The Imperial Regiment Rot-Wurzburg fiercely defends the walls of the Catholic Church in Leuthen

© Alamy

"It's a case of do or die!" he said. "You've got the enemy in front, and all our army behind. There is no space to retreat, and the only way to go forward is to beat the enemy!"

When Great Britain and France went to war again in May 1756, the major powers in Europe quickly took sides. Austria, Russia, Sweden and Saxony sided with France, while Prussia and Hanover sided with Great Britain. Austrian Empress Maria Theresa had a score to settle with Prussia. Frederick had taken the wealthy province of Silesia from Austria during the so-called Silesian Wars of the 1740s. He did so in order to improve the economy of his largely agrarian realm, which lacked minerals and industry. The empress desperately wanted Silesia back.

"THE PRUSSIAN KING WANTED REVENGE FOR THE DEFEAT OF HIS TROOPS AT BRESLAU"

Frederick invaded Saxony on 29 August 1756 to secure the region for his forces and deny it to the Austrians. After a six-week campaign, the Saxons surrendered. The Austrian-led Holy Roman Empire declared war on Prussia on 17 January 1757.

Frederick followed up his Saxony campaign by invading the Austrian province of Bohemia adjacent to Saxony on the south. Although he defeated an Austrian army led by Prince Charles of Lorraine, the empress's brother-in-law, at Prague on 6 May, Austrian Marshal Leopold von Daun handed Frederick his first defeat at Kolin on 18 June.

Frederick then turned his attention to a Franco-Imperial army approaching from the west. Leaving Prussian Lt Gen Augustus William, Duke of Brunswick-Bevern, in Silesia with 41,000 troops to defend the province against the Austrians, Frederick marched east to engage the Franco-Imperial army. He soundly defeated French and Imperial forces on 5 November at Rossbach in Saxony.

Portrait of Frederick the Great by Swiss portrait artist Anton Graff

© Alamy

5 December 1757

How the Prussians defeated a much larger Austrian force

01 SUCCESSFUL FEINT
To deceive the Austrians into believing that he intended to attack their centre, Frederick ordered his light cavalry to form into a line of battle in the late morning east of the village of Borne. He then had the main body of the army begin its flank march by passing through this sector in full view of the enemy. Some of these troops stayed behind temporarily before rejoining the main army further south.

02 PRUSSIANS OVERRUN AUSTRIAN FLANK
An advance guard of three elite Prussian infantry battalions lead King Frederick's 'oblique order' assault at 1.30pm against the Austrian left flank held by Austrian and Imperial troops. The Prussians storm the Kiefenberg where the weak Wurttemberg battalions are deployed behind abattis. The Wurttembergers fire on the Prussians briefly before fleeing their positions. Their flight exposes the flank of other battalions which soon join the flight.

03 PRUSSIAN STORM OF IRON
Prussian 12-pounder long-range guns and howitzers fire round shot and canister at the enemy from high ground south of Leuthen. Frederick issues orders for the batteries to keep pace with the advancing infantry in order to furnish close fire support. The massed artillery moves as many as four times during the battle.

04 SABRE FIGHT
The cavalry posted on the Austrian left wing counter-attacks the Prussian infantry. Before they can inflict casualties on the Prussian foot soldiers, Prussian cuirassiers and dragoons posted on the far right intercept them. A series of mounted melees unfolds over the next hour on the low-lying ground south of Leuthen.

05 AUSTRIANS REFORM AT LEUTHEN
Austrian senior commanders realise that the Prussian main attack is coming from the south. They issue orders for the infantry and cavalry posted to the north to march immediately to Leuthen to establish a new defensive line facing south. Some Austrian infantrymen have to march three miles to reach Leuthen. Because the new line is only two miles long, the Austrians are crowded together.

10 HEROIC REARGUARD ACTION
Several squadrons of Austrian cavalry and a handful of infantry regiments conduct a fighting retreat that keeps the Prussian cavalry from cutting off the Austrian army's escape.

09 AUSTRIAN LINE DISSOLVES
The swirling cavalry melee in the late afternoon disrupts the right flank of the Austrian infantry line. Many of the Austrian musketeers cast aside their weapons and flee for their lives. Prussian cuirassiers run down many of them.

08 MOUNTED MELEE
Sixty-five squadrons of cavalry posted on the Austrian right wing charge the Prussian left flank at 4.30pm, but their advance is disrupted by 55 squadrons of cavalry from the Prussian left wing cavalry. Some of the Austrian horsemen fight with great determination, but others ride away believing the day is lost.

06 SPIRITED DEFENCE OF THE CHURCHYARD
The musketeers of the Rot-Wurzburg battalion man the walls and turrets of the Catholic Church in Leuthen. Six Prussian battalions are committed to the assault on the fortified church. The Austrians repeatedly hurl back the attackers, but the elite Prussian guards eventually fight their way into the churchyard. Some of the Prussian guards fight their way through a side gate, while others storm through a breach in the walls made by the Prussian artillery.

07 DEFENCE OF THE SUNKEN ROAD
The Austrian infantry that survive the street fighting in Leuthen withdraw after an hour-long battle to a sunken road on the north side of Leuthen. When Prussian musketeers attempt to push north from the town, they are greeted by heavy volleys of musketry. In addition, Austrian guns on the high ground near the windmills north of Leuthen shell the Prussians, producing heavy casualties. The pinned-down Prussians await artillery support and reinforcements before they can resume their advance.

Prussian King Frederick II watches the Prussian army as it engages the Austrians at Leuthen

Source: Wiki / PD art

The Austrians moved quickly against Bevern while Frederick was addressing the threat posed by the Franco-Imperial army. Lorraine and Daun defeated and captured Bevern on 22 November on the outskirts of Breslau. Frederick knew that the Austrians were rampaging through central Silesia, but he was unable to reach Breslau in time to stave off disaster. Three days later the Breslau fell to the Austrians.

The Prussian king wanted revenge for the defeat of his troops at Breslau. After assimilating the remnants of Bevern's army with his own at the Silesian town of Parchwitz 30 miles north of Breslau, Frederick marched against the Austrians on 4 December. The Austrians deployed for battle the following day in a five-mile line just west of Breslau. The Austrian line stretched from Nippern in the north to Sagschutz in the south. The villages of Frobelwitz and Leuthen fell within the Austrian line.

Frederick was with the Prussian advance guard when it collided with an Austrian cavalry screen outside Borne early on 5 December. The Prussians won the clash, and they captured 600 Saxon Chevaulegers fighting with the Austrians. The Prussians had so intimidated the Austrian light horse that it would not interfere with the Prussian deployment at midday. In this way, Frederick deprived Lorraine and Daun of their reconnaissance arm when they most needed it. As the morning dragged on, Lorraine and Daun, who had their command post at a cluster of hilltop windmills just north of Leuthen, had no idea where Frederick was or even if he was going to attack them that day.

Frederick surveyed the Austrian battle lines at mid-morning from the Schonberg a mile and a half from the Austrian position. He quickly determined that his best opportunity for success lay in attacking the Austrian left flank. Frederick set off at 11.00am at the head of his army on a three-mile flank march to Sagschutz.

While Frederick was leading the bulk of his army south to assail the Austrian flank near Sagschutz, Austrian right wing commander Lt Gen Giuseppe Lucchese sent urgent requests to Lorraine at noon demanding reinforcements

"THE PRUSSIANS HAD SO INTIMIDATED THE AUSTRIAN LIGHT HORSE THAT IT WOULD NOT INTERFERE WITH THE PRUSSIAN DEPLOYMENT AT MIDDAY"

A double-barrel hunting gun with capsule lock used by the Austrians in the Battle of Leuthen

© Alamy

Prussian infantry advance at Leuthen

Source: Wiki / PD art

against an imminent Prussian attack. Without making a personal assessment of the situation, Lorraine ordered Lt Gen Karl Leopold von Arenberg to reinforce the right wing with his reserve infantry corps. Committing his reserve in such a manner defied military norm.

Shortly afterwards Lorraine received another urgent request for reinforcements. This one came from Lt Gen Franz Leopold von Nadasdy, the Hungarian commander of the Austrian left wing. He insisted that the Prussians were about to attack his troops. For reasons unknown, Lorraine did not even reply to Nadasdy's request.

Nadasdy's flank rested on the low rise known as the Kiefenberg just south of Sagschutz. Facing south on the Kiefenberg were 13 inexperienced battalions of Wurttembergers, who were posted behind abattis. At a right angle to the Wurttembergers facing west were a total of 20 battalions of Bavarians and Austrians.

To carry out his oblique order of attack, Frederick put three infantry battalions in the front as an advance guard. The first line behind them consisted of 20 infantry battalions, and the second line was composed of 11 more infantry battalions. Frederick directed his subordinates that each battalion was to follow at 50 paces behind the battalion to its right. The echeloned formation meant that the units would strike the enemy line a series of successive blows over a 15-minute period. Maj Gen Karl von Wedel's three veteran battalions, one from the 13th regiment and two from the 26th regiment, constituted the advance guard.

Stationed to the right of the main battle line were six battalions whose sole purpose was to protect the Prussian right flank. The flank was further protected by Lt Gen Hans Joachim von Zieten's 53 squadrons of cavalry. On the opposite end of the line, Lt Gen Georg Wilhelm von Driesen had 55 squadrons. His troops were hidden behind the Sophienberg.

The three veteran regiments that led the Prussian main attack began their advance at 1.00pm. As the Prussian infantrymen swept forward, the Austrian gunners went into action. Shells ripped gaping holes in the Prussian lines, but the Prussian troops did not waver.

Frederick had ordered his artillery corps to bring along 12-pounder siege guns from the fortress of Glogau. These thick-barrelled fortress guns, known as 'brummers,' were brought along to make up a deficiency that Frederick's army had in long-range artillery. He ordered the crews manning the brummers to go into action on the Glanzberg to support the attack. Prussian shells slammed into the German musketeers on the Kirchberg, shattering torsos and severing limbs.

Unable to withstand the storm of iron, the German and Austrian infantry fled towards Leuthen with the Prussian infantry in pursuit. After just 20 minutes of fighting, the Prussians had overrun the Kiefenberg and driven all of Nadasdy's infantry north towards Leuthen. In an attempt to stave off disaster, Nadasty ordered his cavalry to charge the right flank of the Prussian line; however, Zieten's troops disrupted and defeated the charge.

A lull occurred at mid-afternoon as Lorraine and Daun scrambled to form a new battle line facing south behind Leuthen. Some of the first reinforcements to arrive took up positions in the buildings of Leuthen in an effort to buy time for the rest of the army to redeploy into a new battle line. The struggle for control of the fortress-like churchyard of the Catholic Church became a focal point of the battle for both sides from 3.30pm to 4.30pm. Despite a valiant resistance by the Rot-Wurzburg Battalion, the Prussians carried the position.

Captain Wichard Mollendorf leads the Prussian Guard in a spirited charge against the well-defended courtyard of the Catholic Church in Leuthen

© Alamy

Prussian grenadiers charging through a broken wall of the church

Source: Wiki / PD art

Source: Wiki / PD art

King Frederick the Great of Prussia and his troops on the night of the victory at Leuthen

General Lucchese, who was responsible for the right flank of the new line, hurled his 65 fresh cavalry squadrons against the Prussian left flank at 4.30pm in an attempt to drive the Prussians back. As the Austrian white-jacketed cuirassiers with their black metal breastplates and Austrian dragoons in their red and green coats thundered towards the vulnerable left flank of the Prussian infantry, Prussian left wing cavalry commander Driesen waved his first line into action.

Driesen's first line consisted of ten squadrons of the vaunted Bayreuth Dragoons. Although they intercepted the Austrians, they soon became hard-pressed. Driesen's second line, consisting of cuirassier squadrons, rode to the dragoons' assistance. The cavalry melee tipped in favour of the Prussians when Prince von Wurttemberg added his 30 Prussian hussar squadrons to the fight.

At that point, the Austrian horsemen fled the field, but not before some of them collided with the Austrian infantry, disrupting their formations. In the meantime, Frederick had massed his guns on the Butterberg. The artillery shelled the Austrian infantry on the plain north of Leuthen. When the Austrian foot began fleeing the field, Prussian cuirassiers and hussars rode them down.

With 6,300 casualties, the Prussians had lost 20 per cent of their army at Leuthen, but the Austrians suffered significantly higher losses, at around 10,000 men on the battlefield, and 12,000 more captured. This totalled around a third of the Austrian forces. By the end of December, Lorraine had withdrawn his army to Bohemia.

Frederick's twin victories at Rossbach and Leuthen prevented Prussia from being defeated early in the war and also compelled the British to sign a formal alliance with Prussia in January 1758. The hard campaigning had taken its toll on the Prussian war effort, though. Frederick's war chest was depleted and his regiments were severely under strength. British Prime Minister William Pitt assured Frederick that he could expect generous financial aid from the British to purchase equipment and provisions.

Many of Frederick's best soldiers had died on the battlefields of Saxony and Austria. The new recruits would require extensive training if they were to be counted on to carry out Frederick's complex tactics.

"THE EMPRESS BELIEVED THAT UNDER THE PROPER CIRCUMSTANCES AUSTRIAN ARMS COULD ONCE AGAIN VANQUISH THE PRUSSIANS ON THE BATTLEFIELD"

Frederick had the audacity to approach Austrian Empress Maria Theresa after his victory at Leuthen with a proposal that they discuss peace terms. But the empress had assurances from the French and Russians that they remained committed to the war against Prussia. Her advisors assured her that as long as the coalition against Prussia remained intact it would ultimately defeat the enemy.

The empress believed that under the proper circumstances Austrian arms could once again vanquish the Prussians on the battlefield. To increase the likelihood of this happening, she made Daun the new Austrian supreme commander.

Frederick contemplated an invasion of Moravia in 1758. Yet before Frederick could pursue operations against the Austrians, he had to confront the Russians who were advancing against him.

In January 1758 the Russian Imperial Army captured Konigsberg in East Prussia. The Prussians and Russians subsequently collided at Zorndorf in Brandenburg in August 1758. The outcome of the battle was inconclusive. But a pattern had emerged. Frederick would have to put out one fire after another as long as the war lasted.

Heroes of the Victoria Cross

FREDERICK GEORGE TOPHAM

A medical orderly with the 1st Canadian Parachute Battalion, Topham ignored his own serious wound to save others' lives during Operation Varsity, the 1945 airborne crossing of the River Rhine

WORDS **MICHAEL E. HASKEW**

When the cry of the wounded rises above the din of combat, the medical orderly is compelled to respond. Amid the chaos of the opening minutes of Operation Varsity, the Allied airborne crossing of the River Rhine, Corporal Frederick George Topham was no different.

By the spring of 1945, as the end of World War II in Europe drew near, Allied armies had advanced from their Normandy beachhead to the frontier of the Third Reich. Poised to cross the great river, the last natural barrier between the Allied forces and Germany itself, 21st Army Group, commanded by the legendary Field Marshal Bernard Law Montgomery, launched a coordinated assault to breach the Rhine.

Operation Plunder, begun on the night of 23 March 1945, unleashed the British Second and American Ninth Armies in amphibious assaults against German defences on the east bank of the Rhine. In support, Operation Varsity, the largest airborne offensive in military history, was begun hours later. The Allied XVIII Airborne Corps contributed 14,000 parachute and glider troops from its US 17th Airborne and British 6th Airborne Divisions to Varsity, the first taste of combat for the Americans and another chapter in the storied history of the British, veterans of the Normandy invasion ten months earlier.

The British and Commonwealth parachute and glider contingent included the 3rd Parachute Brigade, under Brigadier James Hill, and within its command, the 1st Canadian Parachute Battalion. These Canadian paras, among them Corporal Topham, a 27-year-old trooper from Toronto, Ontario, were just returning from a week-long furlough granted after the men had participated in operations to drive the Germans back from their salient created during the epic Battle of the Bulge.

> **"CORPORAL TOPHAM WAS OUR MEDICAL ORDERLY. HE WENT FORWARD IN INTENSE FIRE TO REPLACE THE ORDERLIES WHO HAD BEEN KILLED BEFORE HIS EYES AS THEY WERE TRYING TO TEND THE WOUNDED"**
>
> **Paratrooper Herb Harris**

The 6th Airborne Division was ordered to seize high ground east of the Rhine near the town of Bergen and the northwest sector of the densely wooded Diersfordter Wald along with bridges across the River Issel. Before clambering aboard 35 C-47 Dakota transports and taking off from RAF Chipping Ongar, Essex, Topham and his comrades listened to General Hill exclaim, "What would you think if you saw a horde of ferocious, bloodthirsty paratroopers, bristling with weapons, cascading down upon you from the skies?"

Soon enough, the Canadians found out. The 1st Parachute Battalion began plummeting earthward around 10.00am on 24 March, and almost immediately became heavily engaged with the German defenders, their drop zone (DZ) under intense machine-gun and rifle fire. Some men were killed in their chutes, shot dead

FREDERICK GEORGE TOPHAM

In October 1945, Corporal Frederick Topham donates clothing to a relief effort for European refugees of World War II

© Getty

Corporal Frederick 'Toppy' Topham receives gifts from Toronto Mayor Robert Saunders during ceremonies to honour the Victoria Cross recipient

© Getty

before they hit the ground. Among them was the battalion commander, Lieutenant Colonel Jeff Nicklin, a famed player with the Canadian Football League's Winnipeg Blue Bombers, winners of the Grey Cup in 1935 and 1939 – his bullet-riddled body discovered in a tree.

One para recalled that upon landing he "crouched low, running like hell … conscious of fire coming from somewhere and several men lying motionless in the DZ". Another spoke caustically of "… two hours of real killing". An officer described the scene as "… real flat out fighting until about noon!".

Corporal Topham began feverishly treating his wounded comrades, bandaging torn flesh and administering morphine. In moments, the agonising shriek of another casualty, lying in the open, caught his attention. On the ground less than an hour, Topham turned and watched a pair of medical orderlies dash from their field ambulance toward the wounded paratrooper, first one, and then the other. Both were quickly shot dead by German machine-gunners. Still, the injured man lay exposed.

Topham sprang into action, disregarding the heavy enemy fire and the bodies of his comrades sprawled about. Rushing to the wounded man's side, he knelt and went to work. Bullets kicked up splashes of dirt and whizzed past. Suddenly, a round slammed into his nose, inflicting a grievous wound. Topham was undeterred. Although bleeding profusely himself, the determined medical orderly shouldered his patient and carried the man through a hail of rifle and machine-gun fire to the relative safety of a wooded area.

With utter disregard for his own terrible wound, Topham continued to tend to others amid the confused fighting. Only when the Allied troops in the vicinity gained the upper hand, the Germans were forced to pull back, and every other wounded man in sight had received attention, did Topham allow his own injury – still oozing blood and badly swollen – to be cleaned and bandaged.

"HE WAS EMBARRASSED BY ALL THIS FUSS ABOUT WINNING THE VICTORIA CROSS BECAUSE HE BELIEVED THAT ANYBODY WOULD HAVE DONE WHAT HE DID"

Michael Durant, nephew of Fred 'Toppy' Topham

According to any standard of combat heroism, Topham had done his part. He was ordered to the rear for evacuation. However, he objected strenuously. So passionate was his plea that he was allowed to resume his lifesaving work on the battlefield. As the desperate day wore on, Topham treated dozens of seriously wounded men, no doubt saving numerous lives. He winced often but willed himself through incredible pain to help others.

Finally, as Topham headed toward the area where his company was regrouping, he spotted a Bren gun carrier just set ablaze by a direct hit from a German mortar round. The carrier's own ammunition had begun to cook off, and secondary explosions would surely destroy the vehicle in minutes. While mortar rounds continued to rain down, Topham disregarded an officer's order to stay clear of the conflagration. He charged headlong toward the stricken carrier and pulled three men to safety. One of them

Corporal Frederick Topham, recipient of the Victoria Cross, presents his mother with a war trophy – a Nazi flag – in August 1945

© Getty

died within minutes, but the other two were treated, and Topham saw to their evacuation.

As his day-long ordeal drew to a close, 'Toppy' Topham was exhausted. Within weeks his heroism was documented, resulting in the award of the Victoria Cross, the British Commonwealth's most prestigious award for valour in the presence of the enemy. His citation, dated 3 August 1945, reads in part, "This NCO showed sustained gallantry of the highest order. For six hours, most of the time in great pain, he performed a series of acts of outstanding bravery and his magnificent selfless courage inspired all those who witnessed it."

Topham, who had enlisted in the Canadian Army in August 1942 and experienced the airborne phase of Operation Overlord on D-Day, was characteristically humble in describing his heroism on the day that the 1st Parachute Battalion lost 67 men killed and wounded from a complement of 475. "I only did what every last man in my outfit would do," he commented. Brushing aside any consideration of his own wound, he remarked, "I didn't have time to think about it. I was too busy."

Paratrooper Herb Harris watched in awe as Topham flashed across the field toward any wounded men he could see. "As he worked on the wounded men, he was himself shot through the nose. In spite of severe bleeding and intense pain, he never faltered from his task. I think he just put some penicillin powder on there, and a band aid … Gliders started coming in right after we jumped. They were sitting ducks. The Jerries just opened up on them, just like going out duck hunting. His officers told him he should not go and tend to the men in the gliders, but he just went there regardless … It was quite an experience serving with the finest soldier Canada had to offer."

After the war, Topham returned to Toronto and a hero's welcome. On 8 August 1945, a parade and reception were held to pay tribute to him, while 100 veterans of the 1st Parachute Battalion served as an honour guard. In November, he was asked to symbolically lay the cornerstone of the city's new Sunnybrook Memorial Hospital for Veterans. He settled in the municipality of Etobicoke and took a job as a constable with the Toronto Police Department.

When he realised that the law enforcement establishment had hired him for public relations purposes rather than true police patrol, Topham resigned. He went to work for Toronto Hydro Corporation, the city's electrical utility, 'cheating' death once again in the spring of 1968, when he survived a shock of 4,000 volts and a subsequent fall of 25 feet to the ground below while checking on a power line. He died of a heart attack on 31 May 1974 at age 56.

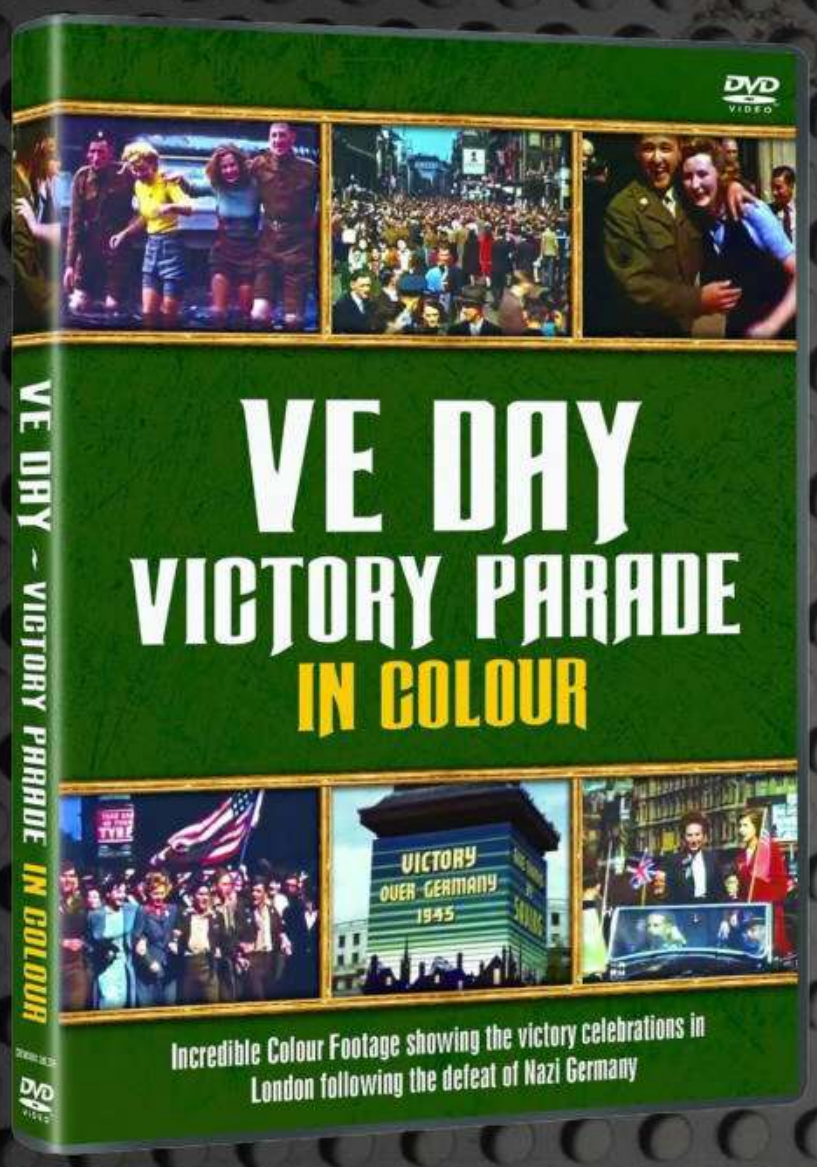
Topham reportedly received his actual Victoria Cross medal sometime in 1946 by "registered post" – anti-climactic, to say the least.

After his death, Topham's Victoria Cross, one of only 16 earned by Canadian military personnel in World War II, was on loan from the family to the Canadian War Museum along with his other decorations. When his widow, Mary, found that they were kept in storage, she reversed an earlier decision to donate the medals to the museum. Her will instructed that the Victoria Cross should be sold for the benefit of her heirs.

A committee of the 1st Canadian Parachute Battalion Association and the Queen's Own Rifles of Canada mounted a fundraising drive, and schoolchildren, ordinary citizens and corporate donors across the country contributed $300,000 to keep Topham's Victoria Cross in Canada, fending off an offer from a prospective purchaser in Britain.

Today, the hero's full medal group resides in the Canadian War Museum, inspiring new generations of Topham's fellow citizens.

SUBSCRIBE TO HISTORY OF WAR AND GET A FREE*



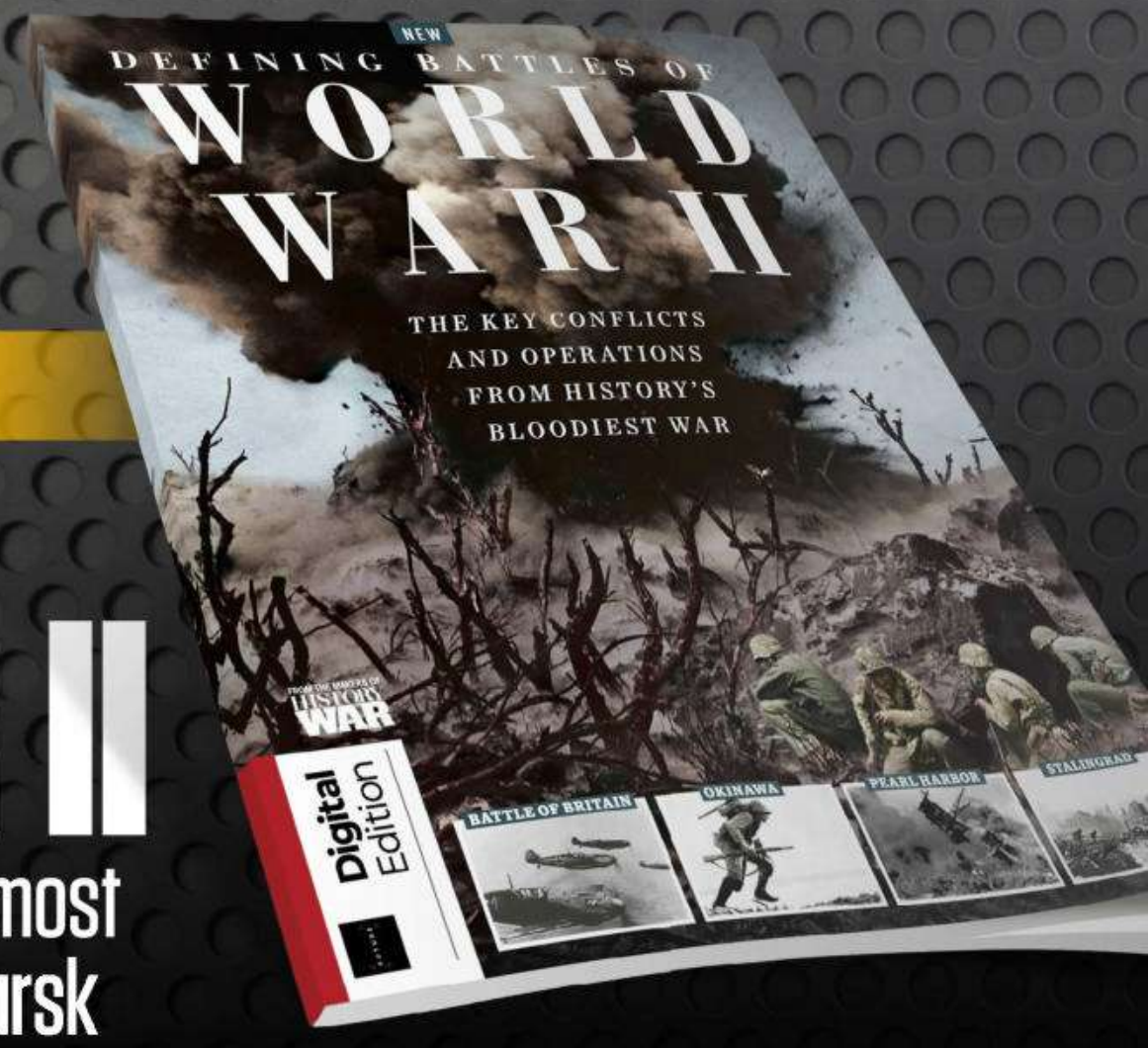
VE DAY IN COLOUR DVD

An original DVD of the Victory Parade featuring colour footage of Winston Churchill

PLUS

DEFINING BATTLES OF WORLD WAR II

Read blow-by-blow accounts of the most critical clashes, from Iwo Jima to Kursk



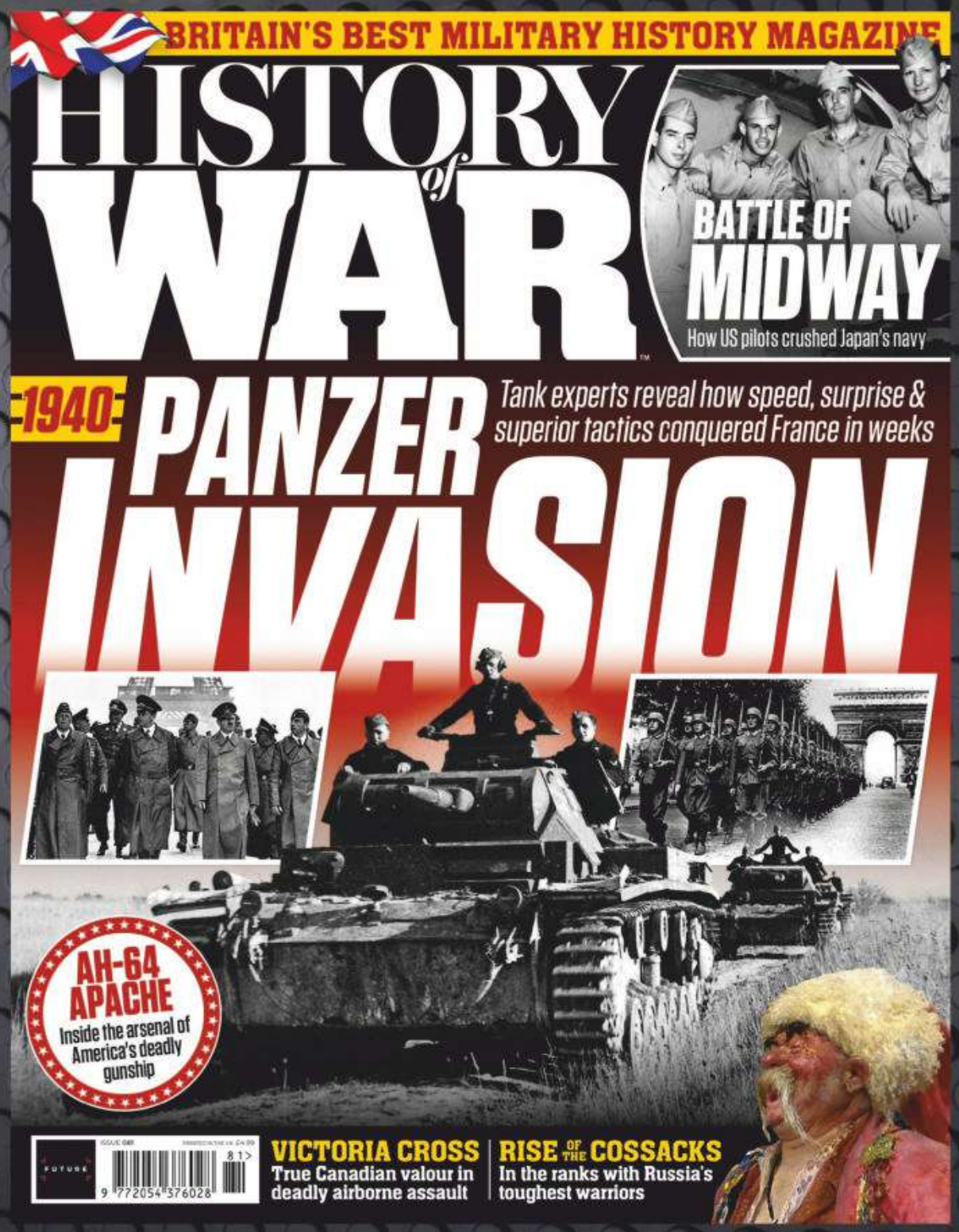
SUBSCRIBE FOR JUST £20.50 EVERY 6 MONTHS

TO ORDER ONLINE VISIT

www.myfavouritemagazines.co.uk/war/war81

REASONS TO SUBSCRIBE...

- You'll never miss an issue
- FREE delivery direct to you
- Brilliant value – save money on the cover price
- Digital subscription only £14.25!



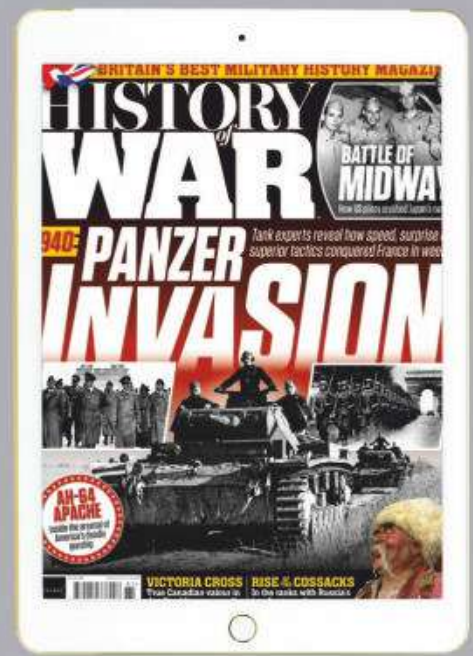
CHOOSE YOUR PACKAGE

PRINT

Six-month subscription to History of War plus DVD and bookazine

SAVE 37%

£20.50



DIGITAL

Six-month subscription to History of War

SAVE 45%

£14.25

***Terms and conditions:** This offer entitles new UK Direct Debit subscribers to pay just £14.25 every 6 months (digital) or £20.50 (print). Gift is only available for new PRINT UK subscribers. Gift is subject to availability. Please allow up to 60 days for the delivery of your gift. In the event of stocks being exhausted we reserve the right to replace with items of similar value. Savings are based on the standard UK print cover price of £4.99 and digital cover price of £3.99. You will receive 13 issues in a year. Your subscription is for the minimum term specified. You can write to us or call us to cancel your subscription within 14 days of purchase. Payment is non-refundable after the 14 day cancellation period unless exceptional circumstances apply. Your statutory rights are not affected. Prices correct at point of print and subject to change. UK calls will cost the same as other standard fixed line numbers (starting 01 or 02) or are included as part of any inclusive or free minutes allowances (if offered by your phone tariff). For full terms and conditions please visit: www.bit.ly/magterms. Offer ends 11th July 2020.

RISE OF THE COSSACKS

For 200 years the rugged horsemen of Ukraine protected their nation against four great empires... until they paid the ultimate price

WORDS **MIGUEL MIRANDA**

The Zaporozhye Cossacks Replying to the Sultan

As the Reformation (1517-1648) plunged the rest of Central Europe into mayhem, a new empire was born on the Baltic coast. The Polish-Lithuanian Commonwealth had a remarkable cohesion undisturbed by religious differences and its territorial extent was only limited by natural barriers. Towards its southern fringes, in the uninterrupted steppes free from the menacing Ottoman Empire's clutches, a warrior nation of Orthodox Christians came to be. It was King Stephen Bathory, of the Hungarian bloodline that ruled Poland in the late 16th century, who first recruited the roving horsemen to act as a buffer separating his kingdom's prosperous farmlands from invasion. To exercise control over these auxiliaries King Bathory kept a 'Register of Free Cossacks' whose members were given rare privileges, such as the licence to fight on behalf of the Polish crown and looting their enemy's possessions. The first notable Cossack was the river pirate Vasily Timofeyovich, better known as Yermak of Siberia, whose doomed expedition against a native chieftain helped open up Russia's far east. By the 1600s the Cossacks had contained the Crimean Tatars, holdovers of the Mongol Golden Horde that dominated Russia for 200 years, and maintained fortified settlements along the Dnieper River in Ukraine.

These Cossacks, a name derived from nowhere for a people without origin, formed a society of libertarians who resisted kingship and serfdom. Although the Cossacks did have a country of their own, a single government never existed to unite them, -so a loose confederation became their chosen political order. Careful not to encroach on land that could be taxed by feudal lords, the Cossacks built settlements on small islands along rivers such as the Dnieper and these became the 'sitch' or 'sech'. Each and every sitch had its own church, armouries, stables, and lodgings for its occupants. A well-provisioned sitch could support a whole polki, or Cossack regiment, led by its captain, the polkovnik. Most important of all was the hetman (later on the ataman) who was chosen by vote to decide matters in the sitch. A hetman wielded authority over his fellow Cossacks but no hetman ruled like a king;

Source: Wiki / PD Art

should his leadership ever be questioned, his own followers had an inviolable right to gather and elect his replacement.

In a segment of the Dnieper River known for its treacherous waters, the Cossacks who settled the zaporog or the place 'beyond the rapids' distinguished themselves for their near-total independence. Constant battles against the Tatars and clashes with the Polish nobility, whose members always sought to enlarge their immense land holdings, moulded the Zaporozhians into a war machine. The Zaporozhians' appearance represented all Cossacks, with scalps shorn of hair save for a twisted lock above the forehead, thick moustaches curling round the edges of their lips. No Cossack could go about without his horse, of the Carpathian Hutsulyk breed, and the curved Circassian short sword known as the shashka; among a multitude of other weapons. From the Tatars they learned to use bows and arrows on horseback; conflict with the Turks also gave them knowledge of firearms; battles against the Poles taught the Cossacks how to effect sieges on fortified towns. Numbering less than 20,000 men – women were spoils of war and lived beyond the sitch – by the early 17th century the Zaporozhian Cossacks' power had grown to such an extent that even the Ottoman Empire could not dislodge them from their sitches whose hetmans commanded war galleys on piratical raids in the Black Sea.

The great rising

A single cataclysmic episode in the Cossacks' history stands as a Ukrainian national epic of sorts. Its central figure is Bohdan Khmelnytsky whose personal grievances with the Polish crown triggered a destructive chain of events. For such a storied individual, details of Khmelnytsky's life are hard to ascertain. Only one of his parents was a Cossack but his education in a Jesuit college put him at odds with the staunch Christian Orthodox values all Cossacks swore by. This did not prevent him from participating in campaigns with the Free Cossacks against the usual foes of the Polish-Lithuanian Commonwealth, such as the emerging Russian Empire, the Crimean Tatars and the Ottoman Turks. In his youth Bohdan was a captive of the Turks but later freed. Far from a staunch patriot, his long association with Poland's king, who granted him the title 'hetman of Ukraine', meant he shared more in common with the Polish nobility he fought against in his final years.

But it was the rapacious nature of Poland's nobles that drove Khmelnytsky to conflict with his former masters. As a Free Cossack of some renown, Khmelnytsky enjoyed land holdings in the Chyhyryn region in central Ukraine, but a dispute with Polish aristocrats or panye who coveted his property spiralled out of control. With his family dispossessed – one of his sons was mauled by a vengeful Polish retainer – Khmelnytsky sought a redress in grand fashion. Rather than beseech the elderly king of Poland, Vladislav IV Vasa, to intercede on his behalf a furious Khmelnytsky roused the Cossacks of Chyhyryn. The resulting mayhem unleashed a crisis that sent tremors across the region. Peasant revolts were still commonplace in 17th century Europe and they were dealt in the usual heavy-handed fashion. Khmelnytsky's falling out with the Polish crown had terrible consequences for the latter. After leading a raid on an isolated Polish garrison on 21 January, 1648, the insular Zaporozhian Host were won over by his leadership and voted him their hetman.

All these events took place in a matter of weeks and triggered an enormous conflict that began as soon as the 30 Years' War (1618-1648) ended. The Polish-Cossack War that spanned the better part of a decade had all the salient features found in nationalist revolts but accomplished something unexpected. The initial years of Khmelnytsky's uprising are a testament to the Cossacks' martial prowess once they had mobilised their entire community. By 1649 Khmelnytsky had 300,000 Cossacks under his command and an informal alliance with the Crimean Tatars, who were enticed by promises they could loot Poland's riches, promised 100,000 additional fighters. Rather than just throw out the Poles from Ukraine, Khmelnystky's forces invaded the bastions of the panye and laid waste to their holdings. But as the war dragged on, with the Polish elite unbowed in the face of crippling losses, the Cossacks struggled to achieve a lasting victory. Even at the height of his campaigns, Khmelnytsky made sure he corresponded with the Polish king. When Vladislav IV Vasa expired from old age in 1648 his successor John II was a reasonable monarch whose openness to a resolution with the Cossacks was stumped by hawkish aristocrats. Through multiple letters, Khmelnytsky assured the king that peace was achievable if the Cossacks were given an updated registry and allowed to live under their own laws, without interference form the Poles and their intermediaries.

"THE ZAPOROZHIAN COSSACKS' POWER HAD GROWN TO SUCH AN EXTENT THAT EVEN THE OTTOMAN EMPIRE COULD NOT DISLODGE THEM FROM THEIR SITCHES"

Defeat and despair

As the conflict dragged on and grew in scale, with German and Swedish troops participating by the 1650s, a troublesome aspect was the humanitarian impact it had on the Polish-Ukrainian frontier. The Cossacks, with their predisposition to warfare and plunder, used the cause championed by Khmelnytsky as licence for xenophobic violence. The Jewish population

Tsar Nicholas II and his family with Cossack officers of the Konvoy, 1916

Source: Wiki / Beinecke Rare Book and Manuscript Library, Yale University

Cossack soldier as he stands at his horse's head during anti-gas training in the Krasnodarsk region of Soviet Russia

© Getty

COSSACKS WITH KALASHNIKOVS

Cossacks have been an integral part of Russia's armed forces since the late 18th century. Their roles have evolved over generations and whole eras but when it came to policing cities and towns, as well as supporting regular army formations, Cossacks were indispensable. After the fall of the Soviet Union, Cossack militia were sent to fight in the Chechen Wars and beyond. The outbreak of hostilities between Ukraine and Russia in 2014 was no exception and brought an old pattern into play. Once again, in circumstances that echoed the dreadful years of the Great Northern War 300 years before and Ukraine's brief independence from 1917 until 1921, the Cossacks' own loyalties were torn between great powers. As the Russian military seized the Crimean peninsula and fomented separatist revolts in Ukraine's vulnerable east, armed Cossacks were on the ground swearing to defend Russia against 'fascism', albeit with Moscow's full blessing.

An actual Cossack ataman, Pavel Dremov, organised the 'Motorised Cossack Regiment' in separatist-controlled Luhansk although the exact size of this formation is debatable; a motley assortment of groups with various persuasions formed the local separatist movements in Ukraine's east. In post-revolutionary Kyiv, however, the sudden national emergency brought on by the loss of Crimea saw volunteers swell the armed forces' ranks. Just as in past crises, an ardent patriotism was exhibited by local Cossacks – or citizens who claimed to have Cossack ties – who were prepared to defend Ukraine from an invasion.

As the disorder that gripped the east blossomed into actual fighting between the Ukrainian military and Russian forces embedded among 'separatists', Cossacks from either side were in the thick of it. Gone were the horses and muskets, replaced by machine-guns and anti-tank missiles. The separatists' material and financial support delivered by Moscow was always made to appear deniable although the scale of battles in Donestk's airport proved otherwise. Dremov himself, after leading his regiment in a difficult year of combat, was killed when his car exploded in late 2015. Those behind his assassination were never exposed.

Six years after the Euromaidan revolt, Ukraine's troubles with Russia are unresolved and two separatist enclaves remain out of Kyiv's control. History does rhyme, and just like so many instances from the past, Ukraine stands divided along the banks of the Dnieper River, where the east is consumed by disorder and the west asserts its independence from Russia.

Since Cossacks celebrated martial prowess an entire performance art grew out of their horsemanship and swordplay

© Getty

© Getty

in Ukraine at the time were near helpless when Cossacks drove them away from their homes and organised brutal massacres. Besides the cruelty inflicted on peasants, the atrocities committed by Cossacks on Jews remains a black mark on their historical record, and exposes a hideous feature of their identity. As a martial culture that celebrated freedom from any tyrant's yoke, the Cossacks harboured murderous intent toward those deemed lesser than themselves, be they Jews, Muslims, or Roman Catholics. The hatred for Jews could have stemmed from their association with the Polish nobility where Jews served as intermediaries and partners in business affairs. For the Cossack sitches who shunned commerce and trading the role of Jews in the regional economy roused Cossack prejudice and made them legitimate targets.

When the alliance with the Tatars became untenable after the failed siege of Zbrarazh in 1649, where the Cossacks almost routed the Poles only to be abandoned by the Tatars, Khmelnytsky realised that a Cossack state needed a powerful ally to guarantee its existence. In 1654 Khmelnytsky organised a gathering of the Cossacks at Pereyaslav to weigh their options. Getting on in years, an exhausted Khmelnytsky deemed the Russians ideal allies since the Orthodox church bound them together. Once the Czar's boyars arrived to finalise a treaty, a broad and elaborate set of conditions was agreed upon, and without consulting the rest of the Cossack sitches Khmelnytsky allowed Russia to assert an ill-defined control over Ukraine.

Reeling from its long war against the Cossacks, the Polish-Lithuanian Commonwealth almost crumbled when Sweden invaded the Baltic coast in 1655. But the Cossacks themselves were exhausted by their crusade and when Khmelnytsky passed away from a stroke in 1657, the goal of an independent Ukraine died with him. In hindsight, Khmelnytsky's contribution to Ukrainian nationalism seems dismal. His death meant the emerging 'hetmanate' was robbed of a founding father who would have steered the country toward a republican government steeped in Cossack tradition. The sudden association with Russia meant the Cossacks were embroiled in 300 years of warfare against the Ottoman Empire. This paved the way for another turning point in Cossack history that involved the Zaporozhians.

As Czar Peter the Great's territorial expansion brought Russia's borders closer to the Black Sea and the Baltic coast the stage was set for the Great Northern War (1700-1721) where an ascendant Sweden led by Charles XII, the military genius of his age, built a regional alliance against the Russians. Caught in the unfolding drama were the Cossacks, whose sitches in the left bank of the Dnieper were sworn to Russia while those in the right bank had ties with a weakened Poland.

It was the hetman Ivan Mazepa, whose personal loyalty to Czar Peter was unquestioned, who led his people to near ruin. Like Khmelnytsky before him he was a fighting man in his youth with a distinguished reputation. But as age crept up and his wealth grew he grew tired of the Cossacks' fealty to Russia. Of course, the pace of events paid little heed to a hetman's qualms. As Poland was crushed under the weight of another Swedish invasion the Cossacks, including the renowned Zaporozhians, were encouraged to intervene by the Russians. Rather than obey – Mazepa and the Czar were comrades in arms once, having fought the Ottomans in the waters of the Volga – the hetman dallied and feigned unease. At the opportune moment, Mazepa committed himself to a course of action that surprised all – he received Charles XII's army with open arms as it marched into Ukraine.

"AS AGE CREPT UP AND HIS WEALTH GREW HE GREW TIRED OF THE COSSACKS' FEALTY TO RUSSIA"

Unbeknownst to Czar Peter, Mazepa was in contact with the Swedish court for months and secured promises of quasi-independence and land grants should the Cossacks throw in their lot with Charles XII. In the course of two years, however, when Charles XII's campaign was left in disarray, it was the vengeful Russians who marched on Ukraine. After the battle of Poltava on 8 July 1709, almost wiped out the Swedes to a man Mazepa was left with no choice but exile. He chose the protection of the Sublime Porte or the high office of the Ottoman Sultan to save him from Czar Peter's wrath. This may appear a strange choice for a Cossack given their reflexive hatred of Turks and Islam, but the pragmatism that underlay the Cossacks' zeal meant finding strange bedfellows was a skill exercised when needed. Mazepa's decisions in these dreadful years embodied the timeless adage 'the enemy of my enemy is my friend'.

The last stand

By the 18th century the Russian empire had assumed an enormous size, stretching from

Every Cossack was raised to become a soldier adept with multiple weapons. One field of activity they were taught to disdain was commerce – better to plunder than work for money!

THE DON COSSACKS

Once Catherine the Great stripped the Zaporozhian Cossacks of their arms and privileges on 5 August 1775, the much touted freedom associated with the horsemen was little more than a formality. The Napoleonic Wars and other conflicts in the 1800s meant that the Cossacks were the Czar's chosen frontiersmen with as many as 80 regiments spread across the Russian empire, be it in the restive Caucasus mountains or the deserts of Turkestan. The Don Cossack regiments that served with the imperial army were the true successors of the Zaporozhian Host and fought in every major conflict involving Russia until WWI. Yet in appearance and conduct these professionals were far removed from the boisterous Cossacks from the days of Bohdan Khmelnystky.

The rise of the Bolsheviks in 1917 marked a low point for Ukraine's Cossacks. With the Romanov dynasty murdered and the former Russian empire in disarray, the new regime made sure to suppress the community and – when possible – entice other Cossack factions to join the Soviet cause. It turned out the descendants of the Zaporozhian Host embraced the cause of Ukrainian nationhood as 'Free Cossacks' while the Cossacks in the east bank of the Dnieper River accommodated the Soviets. This revived a familiar problem in Cossack history where different hetmen chose their allegiances depending on which side is more profitable.

The near-genocide inflicted by Joseph Stalin's minions on the Cossacks in the 1920s almost wiped out their entire population but WWII, or the Great Patriotic War, revived the Cossacks' fortunes and even saw them hailed as unfailing patriots. Stalin did make sure Cossacks with strong pro-Ukrainian sentiments who joined the Nazis were eliminated. Although Cossack identity is now a bit muddled Russia's government still employs its own Cossacks to uphold law and order.

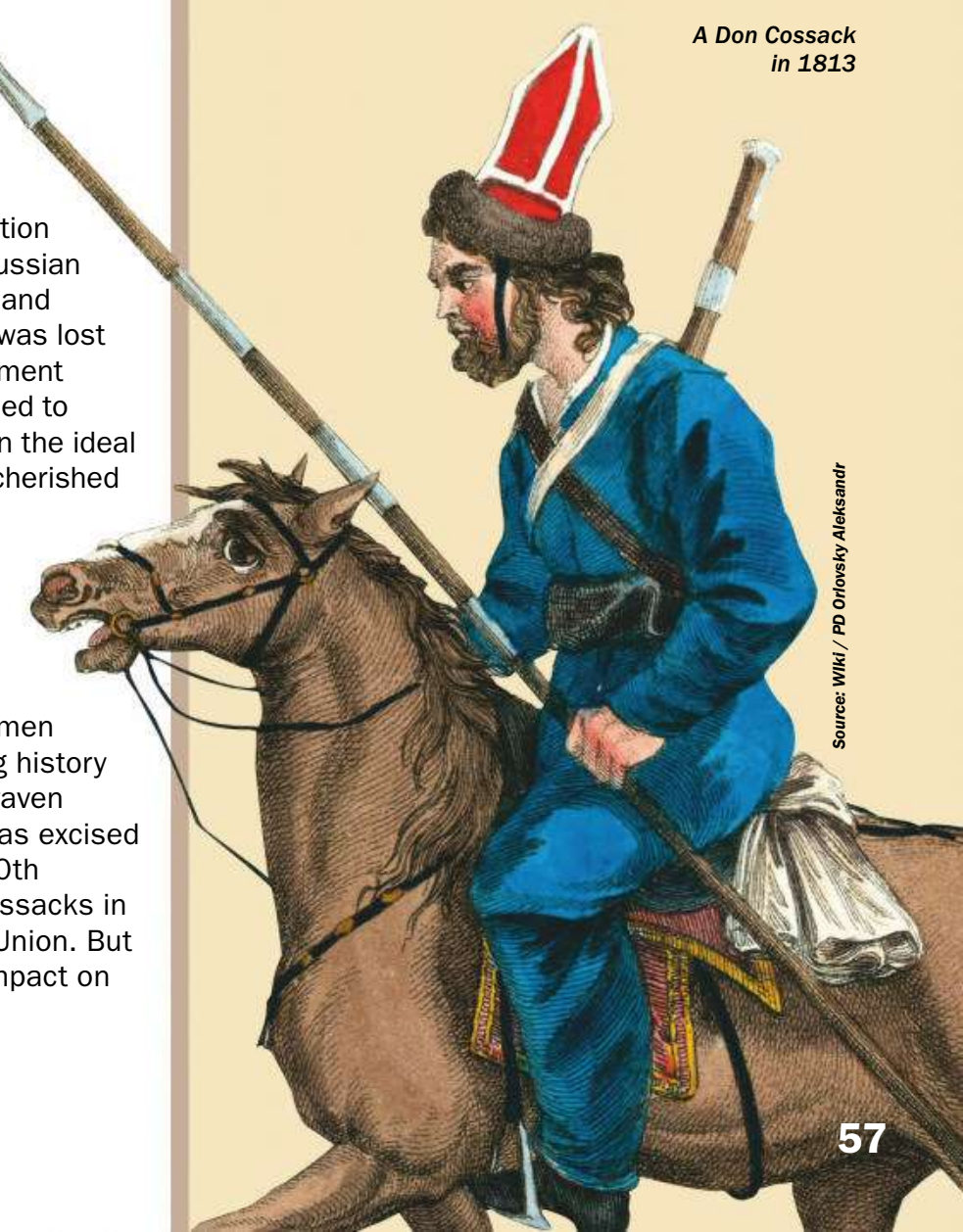
the Belarusian marshes to the Bering Strait, and prospered from its vast natural resources. Still, trouble loomed over its distant borders. Foremost were the intermittent wars against the Ottoman Empire, whose diminishing control over the Caucasus and the Balkans were hastened by the Cossacks. Besides the Zaporozhians, there were now other sitches beyond Ukraine who provided horse regiments to St Petersburg. This was intentional as Cossacks were encouraged to migrate deep inside Russia and establish settlements. But all was not well during the long reign of Czarina Catherine.

In a striking parallel to the same years when the American Revolution shook the British Empire's hold on North America, a would-be revolution was brewing in the southern edges of the Russian empire. At the heart of it was another Cossack named Yemelian Ivanovich Pugachev who had deserted from the Russian army. At a time when onerous taxes inspired popular hatred of imperial rule, in 1773 Pugachev led a revolt that drew Russian Cossacks and peasants together. As the violence spread across a larger and larger area, encompassing Russia's vast farmlands that produced bountiful harvests year-on-year, the Czarina's court in St Petersburg struggled to contain the unrest before it engulfed the empire.

The revolt was only halted when the Czarina's army lifted the siege of Orenburg in 1774 and captured Pugachev in January the following year. The rebel hetman was executed for his crimes and Czarina Catherine made sure her government would punish the troublesome Cossacks of Ukraine. It was among the sitches in the Dnieper where Pugachev lived as a fugitive for many years, abetted by outlaw priests and fellow Cossacks, before his surprising turn to rebellion. When the Zaporozhian Cossacks, who had restored their privileges by swearing fealty to Czar Peter two generations ago, set out and raided Polish towns in the summer of 1775 the Czarina used these outrages as a pretext for sending her army into Ukraine in August and humiliating the Cossacks with a wholesale disarmament. In a symbolic betrayal of their forebears, the Zaporozhians could not muster any resistance and meekly accepted their humbling. It might not have occurred to them at the time, but this supplication left Ukraine a mere province in the Russian empire, whose plans for annexing Poland were now in motion. Something else was lost by the Cossacks in 1775. In their moment of weakness, they were forever reduced to vassals of the Czars and from then on the ideal of 'Free Cossacks' was just that – a cherished vision of bygone glory.

From Leo Tolstoy's pen to the painter Ilya Repin's colourful depiction of the Zaporozhian Cossacks mocking the Turkish sultan, the Cossacks were rehabilitated in the 19th century as men belonging to wild frontiers. Their long history of plunder and warfare, as well as craven submission to an imperial Russia, was excised from the popular imagination. The 20th century was even more unkind to Cossacks in both Ukraine and the former Soviet Union. But despite everything, the Cossacks' impact on Eurasia can never be diminished.

A Don Cossack in 1813



Source: Wiki / PD Orlovsky Aleksandr

MIDWAY

The Battle that turned the war in the Pacific

WORDS **JAMES HOLLAND**

Source: Wiki / PD Gov

Source: Wiki / PD Gov

Source: Wiki / PD Gov

“IN THOSE SEVEN MINUTES EVERYTHING CHANGED IN WHAT WAS REALLY THE AMERICAN TRAFALGAR AND WHICH SAW THE IMPERIAL JAPANESE FLEET ANNIHILATED”

At 10.20am on the morning of 4 June 1942, the United States was losing the war in the Pacific. At 10.27am, it was winning. In those seven minutes everything changed in what was really the American Trafalgar and which saw the Imperial Japanese Fleet annihilated in a spectacular confrontation that was dramatically unexpected. It’s an incredible story and it’s no wonder it has become the subject of a new movie.

When the Japanese entered the war with their assault on Pearl Harbor in Hawaii on the morning of 7 December 1941, it’s important to understand what it was they were trying to achieve. There was certainly no grand plan to conquer the United States and take over the White House. Rather, it was about creating time; the idea was to cripple the US in a dramatic single strike to buy them perhaps six months or more – time in which they would conquer the resource base they would need to continue their war in China. By the 1930s, Japan was rapidly modernising, its cities growing, and yet it did not have the resources or access to resources to support this growth. China, on the other hand, most certainly did, and so its increasingly nationalistic and militaristic leadership invaded in 1937. It did not all go to plan, however, and they soon became bogged down in an attritional conflict that quickly began to cost them a lot more than they were gaining.

All around southeast Asia, however, were all the resources they needed, but these territories were owned by the British, the Dutch and the Americans. Already, in 1940, following the fall of France to the Germans, the Japanese moved into French Indochina (now Vietnam), a strike that greatly unsettled the Western powers. Most of Japan’s oil and steel was provided by the USA, who responded to Japanese aggression by making it far harder for them to continue buying these essential goods. This put Japan in a difficult position. Either they had to back down, pull out of Indochina and even China with the loss of face and economic catastrophe that would entail, or come up with an alternative plan to get them out of the mire. When Prime Minister Konoe resigned in November 1941 and Hideki Tojo took over, the die was cast. Tojo was an ultra-nationalist and hawk who believed that for all America’s might and wealth, culturally, the USA did not have the stomach for a fight. The Japanese might have been materially weak, but they did have a modern, highly trained navy. Mentally and psychologically, they also believed they were superior. And so the idea of a strike on Pearl Harbor was born – a daring attack that would knock out the US Pacific Fleet in one blow and buy them precious time.

The attack on Pearl Harbor was the idea of Admiral Isoroku Yamamoto, a highly cultured man who had studied in the USA and who was opposed to Japan going to war. However, he believed this gambler’s throw of the dice was the only way in which Japan could solve the conundrum in which they found themselves. It was daring, it was bold, but it was also flawed because back on 27 November 1941, Admiral Husband Kimmel, commander-in-chief of the Pacific Fleet on Hawaii, was warned by Washington that war with Japan might break out any moment. Kimmel responded by sending two of his four aircraft carriers out of Pearl Harbor and to the Pacific outposts of Midway and Wake, two small atolls turned into military bases. A third carrier was undergoing a refit and the fourth was serving in the Atlantic.

The Japanese attacking Pearl Harbor caused untold damage: 353 aircraft operating from

USS Yorktown is hit by a Japanese aerial torpedo during the mid-afternoon attack in the Battle of Midway, 4 June, 1942

Source: Wiki / PD Gov

***Main image:** A still from the movie Midway which is out now on Digital Download, 4K Ultra HD, Blu-ray and DVD*

***Inset, left to right:** US Navy pilots that flew the torpedo attack mission against the Japanese fleet’s Midway Occupation Force during the night of 3-4 June 1942*

Aerial photograph of Midway Atoll, 24 November 1941

US Navy Admiral Chester W. Nimitz, Commander-in-Chief Pacific Fleet

© Lionsgate

their own carriers achieved total surprise, their torpedo bombers crippling the US Pacific Fleet while dive-bombers hammered the island's airfield. Within minutes all eight battleships had been hit. A further 171 aircraft in the second wave roared in to attack a short while later, so that where once there had been 'Battleship Row' there was now a mass of twisted metal, angry flames and billowing, thick smoke. And a lot of dead American servicemen. On the airfields, 188 aircraft were destroyed and a further 159 damaged. Also hit were three cruisers, three destroyers and three other vessels.

Witnesses were stunned by how low the Japanese pilots flew. "Hell, I could even see the gold in their teeth," observed one army officer. "It was like being engulfed in a great flood, a tornado or earthquake," said another. "The thing hit so quickly and so powerfully it left you stunned and amazed."

Pearl Harbor was seen as a terrific success in Japan, although not by Yamamoto, who was hugely disappointed. He understood that a shift had taken place in naval warfare – that battleships were no longer the pre-eminent warship but rather, that mantle had been passed to aircraft carriers, and for all Pearl Harbor's success, not one American carrier had been hit. Yamamoto understood that his navy simply had to destroy those carriers, and so immediately began planning how he might get them, and Midway, he believed, held the key. He would not target the tiny Midway atoll for invasion, but rather, use it as bait. By threatening this vital US base, the Americans, he hoped, would be forced to defend it and send their carriers. And when they did, his superior force would pounce and destroy them.

First, though, the Japanese Army, supported by the Navy, had to consolidate its own position in the Pacific and Southeast Asia. Malaya, Singapore, the Dutch East Indies, Burma and the US Philippines were all overrun in an astonishing series of rapid and extremely violent strikes. The ABDA command (American, British, Dutch and Australian) was both under-prepared and caught off guard and had no answer, but while the Japanese might have appeared unstoppable, the threat from the rapidly growing US armed forces, and especially its navy, had in no way gone away.

Meanwhile, the US was also planning how to strike back. American strategy in the Pacific was led by Admiral Ernest King, the head of the US Navy. His approach was clear and based around two fundamental factors: first, Hawaii could not be allowed to fall, and second, nor could Australia. He ordered Admiral Chester Nimitz, who had replaced Kimmel, to make his first priority to secure the seaways between Hawaii and the island of Midway, just to the east of the international dateline, and the North American mainland. His second priority was to make safe the routes to Australia. Fiji and the Samoan and Tonga Islands needed to be made secure as crucial strong points along the way, and from these bases a counter-offensive could be then launched up through the Solomons,

Source: Wiki / PD Gov

The pilots of the US Marine Corps scout bomber squadron VMSB-241

A US Navy Grumman F4F-3 in early 1942

Source: Wiki / PD Gov

New Guinea, Borneo and then, in time, the Philippines. It was the correct strategy.

On 1 February, the US Navy's fightback got underway with a series of raids on shipping and airfields on the Japanese-held Marshall Islands. Although the material damage was less than had at first been thought, it had taught the Americans vital lessons and got the fightback underway.

In April 1942, they launched the Doolittle Raid, flying sixteen B-25 bombers from the carrier USS Hornet and bombing ten different targets on Japan, including Tokyo. While the physical damage was small, the psychological impact was huge as it made the Japanese realise they were not impervious to attack themselves. It also ensured the Japanese Army, which was a ferocious rival of the Navy, now agreed to support Yamamoto's plan to lure the Americans at Midway.

Further US carrier raids were mounted but the first major naval clash came in May 1942. The Japanese now wanted to disrupt Allied

"WHILE THE PHYSICAL DAMAGE WAS SMALL, THE PSYCHOLOGICAL IMPACT WAS HUGE AS IT MADE THE JAPANESE REALISE THEY WERE NOT IMPERVIOUS TO ATTACK"

plans by invading and occupying Port Moresby in New Guinea, to the north of Australia, and also the island of Tulagi in the Solomons. Crucially, American cryptanalysts had broken Japanese codes, however, and learning of the plan, a joint US-Australian naval force of carriers and cruisers was sent to intercept and stop the enemy's plans. Tulagi was invaded on 3-4 May, but the Japanese had been surprised to come under attack by American aircraft from the carrier Yorktown. They now advanced to meet the Allied naval forces, clashing in the Coral Sea on 7 May.

This was the first battle in which aircraft carriers engaged one another, and both the Americans and Japanese lost one each and suffered damage to the others. On 8 May, US radar screens picked up enemy aircraft heading towards USS Lexington and Task Force 17, and her Wildcat fighters were scrambled to meet them. Then, at 11.13am, lookouts spotted the black dots of enemy aircraft. As they approached, the attacking torpedo bombers split into two groups while enemy dive-bombers peeled over and down towards the Lexington, which was now frantically taking swerving evasive action. The enemy planes met a wall of anti-aircraft fire as well as the Wildcats. "It seemed impossible we could survive our bombing and torpedo runs," said Lieutenant Commander Shigekazu Shimazaki, the Japanese attack commander. "Our Zeroes and enemy Wildcats spun, dove, and climbed in the

US Navy aircraft carrier USS Yorktown shortly after it was hit by Japanese bombs on 4 June 1942

Source: Wiki / PD Gov

midst of our formations. Burning and shattered planes of both sides plunged from the skies."

Despite the heroic defence, Lexington was hit by both bombs and torpedoes, but amazingly, fire-damage parties managed to restore her to sea-going order before a series of explosions ensured the mighty carrier would have to be abandoned and scuttled. With both sides suffering heavy losses of aircraft as well as ships, the battle ended as dusk fell on the second day of battle. Crucially, the Battle of the Coral Sea ensured the Japanese abandoned their plans to invade New Guinea.

Admiral Yamamoto is rightly feted as an inspirational and enlightened commander, but his plan for Midway was too complicated at a time when it did not need to be. At this stage of the war, they had both quantitative and qualitative superiority over the Americans: their torpedo bombers were better, their pilots better trained and they had more warships than the Americans. It would not last, as Yamamoto was well aware, which was why Midway presented a golden opportunity to set the US Navy back not just six months but potentially much longer. In the intervening time, the Japanese could further extend their defensive ring. With luck, Yamamoto hoped the Americans would then sue for peace and the Japanese would be left alone, now resource-rich and able to finish a victorious war with China.

His plan was to entice the US Pacific Fleet into battle by separating his forces, with his carriers and battleships several hundred miles apart. The plan was to attack the enemy carriers and then follow up with his battleships and cruisers, who would then engage whatever American ships remained.

Just as Japanese intelligence was poor, however, US intelligence was excellent. American code-breakers had intercepted and cracked enough Japanese naval signal traffic to give them a picture of what the enemy was up to. It was Admiral Nimitz's responsibility to interpret this intelligence picture and work out what to do about it. He knew the Japanese had four or five carriers and that he had three. On the other hand, he could use the airfield of Midway as an unsinkable carrier, which potentially evened it up. Even so, his decision to take on the Japanese was a huge one and massive risk, albeit a carefully calculated one.

It was perhaps more so because his main carrier task force admiral, Bill Halsey, was ill, which left him short of a carrier commander. He filled the post with Admiral Ray Spruance, who was hugely competent but whose experience lay with commanding cruisers, not carriers. Spruance was appointed at the last minute and headed out to take command of Halsey's two carriers in what was unquestionably going to prove a decisive clash against the Japanese. Admiral Jack Fletcher was overall US commander at sea.

The clash began on 4 June with the Japanese sending the carrier air forces to attack Midway. Because they had no idea the Americans had cracked their codes, they had been expecting to catch the US air forces napping on the atoll, but in fact, the American bomber force had already taken off to attack the Japanese carriers. Yet the first American air strike on the Japanese carriers was a disaster. US naval air forces – a combination of heavy bombers and

US Navy Torpedo Squadron 6 and Douglas TBD-1 Devastator aircraft are prepared for launching aboard the aircraft carrier USS Enterprise

Source: Wiki / PD Gov

torpedo bombers – were arriving from Midway at different times rather than as a concentrated mass. Japanese naval fighters were scrambled and because of their superior skill and capabilities, picked them off with ease. The American torpedo bombers missed entirely and were largely slaughtered. Then the B-17 heavy bombers from Midway arrived, but were too high, too inaccurate, and although from 20,000 feet up the carriers below had disappeared behind huge fountains of water, not one had been hit.

At this point, the Japanese were unquestionably winning the battle and with it, the war in the Pacific. It was, though, now time for the US carriers to launch their strike force. Radio intelligence reaching the carriers suggested a location for two of the Japanese carriers but not the remaining pair. All three US carriers were now ordered to send in their own aircraft to attack the Japanese, but the commander of USS Hornet ordered his men to head in a different direction to look for the missing enemy carriers. It was a hunch, and, as it turned out, an entirely wrong one too. This meant that with the Midway air forces effectively destroyed, and Hornet's force

"THREE CARRIERS HAD BEEN STOPPED DEAD IN THE WATER, THEIR AIRCRAFT DESTROYED AND EACH ONE NOW A FLOATING INFERNO"

heading in the wrong direction, the US now had only two carriers against four Japanese – and so dramatically slashing the odds of success.

The trouble was, those aircraft could not find the Japanese either, and fuel was starting to get a bit low. Commanding the dive-bombing squadrons from USS Enterprise was Lieutenant Commander Wade McClusky, with a further squadron from Yorktown. McClusky was determined not to turn for home without having spotted the Japanese carrier fleet. His courage paid off because in the nick of time, he spotted the wake of a Japanese destroyer going at speed and realised it had to be trying to rejoin the main force. Ordering his men to head in the direction the destroyer was steaming, sure enough, at 10.22am they spotted the Japanese carriers. And there weren't two of them, but all four.

Ahead of McClusky's bombers, however, was one squadron of torpedo bombers from Hornet, commanded by Lieutenant-Commander Jack Waldron, who had disobeyed the orders and flown his men towards where he believed the enemy carriers would be. He had been quite right but was about to pay a terrible price. Once again, Japanese naval fighters and gunners on board the ships made mincemeat of the American torpedo bombers, and all 15 were shot down; Waldron was among those killed.

Yet the sacrifice of the torpedo squadron gave a glimmer of hope to the bombers, because with the Japanese fighters focusing on the torpedo squadron as they attacked at low level, McClusky's 30 dive-bombers as well as the 15 from Yorktown were left alone. Despite anti-aircraft fire, dive-bombers now had a fairly clear run. The two squadrons from Enterprise were ordered by McClusky to split into two and attack two of the Japanese carriers at the

US Marine Corps Scouting Bombing Squadron 241 in flight over Midway Atoll

Source: Wiki / PD Gov

Japanese prisoners of war on board USS Ballard after being rescued from a lifeboat two weeks after the Battle of Midway

Source: Wiki / PD Gov

same time, but through a miscommunication, all 30 began diving towards Kaga. Realising the mistake, Lieutenant Dick Best and two of his wingmen, swung north to attack Akagi. Meanwhile, Kaga was struck between four and five times, with one bomb hitting near the bridge and killing the carrier's commander and senior officers.

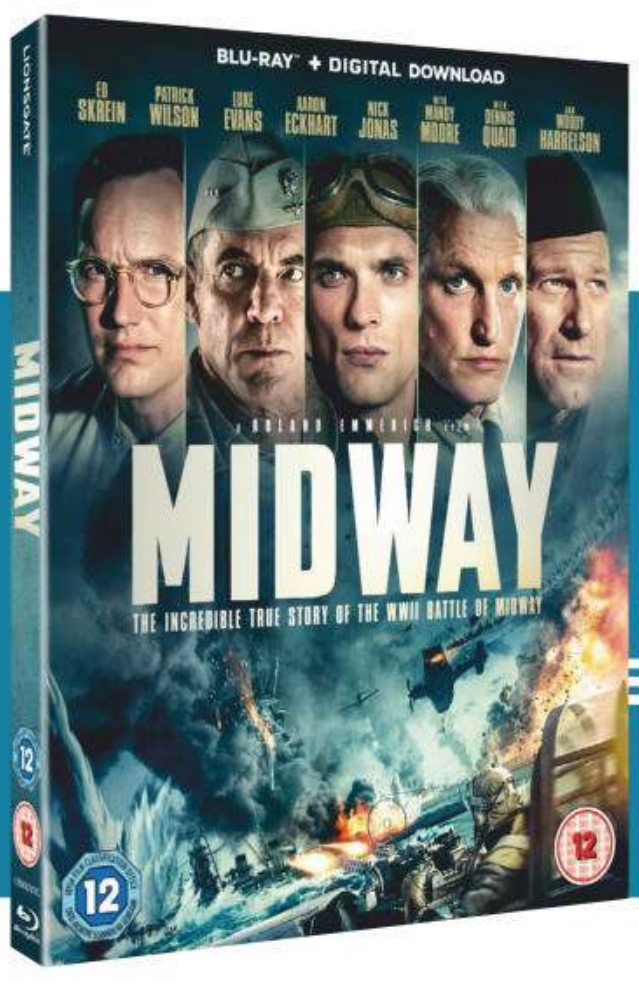
A few minutes later, Best and his wingmen were diving on Akagi. Although only hit once, and by Best, it was a fatal strike as it penetrated the deck into the main hanger causing a massive explosion and fires. Another bomb had damaged the rudder.

Two aircraft carriers had been destroyed in a matter of minutes and now it was the turn of Yorktown's dive-bombers, commanded by Max Leslie, this time targeting Soryu, and hit it three times. Three carriers had been stopped dead in the water, their aircraft destroyed and each one now a floating inferno. The fourth carrier managed to survive the onslaught and soon after launched a counter-attack, hitting and crippling Yorktown. Later that afternoon, however, after a scout plane from Yorktown located the final carrier, Hiryu, the dive-bombers of Enterprise took off again, found the fourth carrier, and hit the ship four or five times, including a second bomb from Dick Best.

The Japanese abandoned ship and then scuttled the Hiryu, although Rear Admiral Tamon Yamaguchi and the ship's captain, Tomeo Kaku, decided to remain on board and go down with the vessel. This act of seppuku robbed the Japanese of their best carrier commander.

Although the loss of Hiryu was a terrible further blow for the Japanese, in truth the battle, and arguably the entire Pacific War, had been won in those seven minutes between 10.20am and 10.27am. It had been an astonishing victory by the Americans, who, without doubt, had begun the day as the underdogs. On that one June day, however, Japanese hopes of further consolidation in the Pacific were dashed for ever, their one chance to halt the Americans lost.

And just two years later, the US Navy attacked the Japanese island of Saipan with a staggering 24 carriers. Its moment of weakness had been in the initial six months of war, but at Midway, good fortune, brilliant intelligence and bare-faced courage had conspired with Japanese hubris to bring about surely the greatest victory at sea in American history. The Japanese failure at Midway was one for which they would pay dearly.



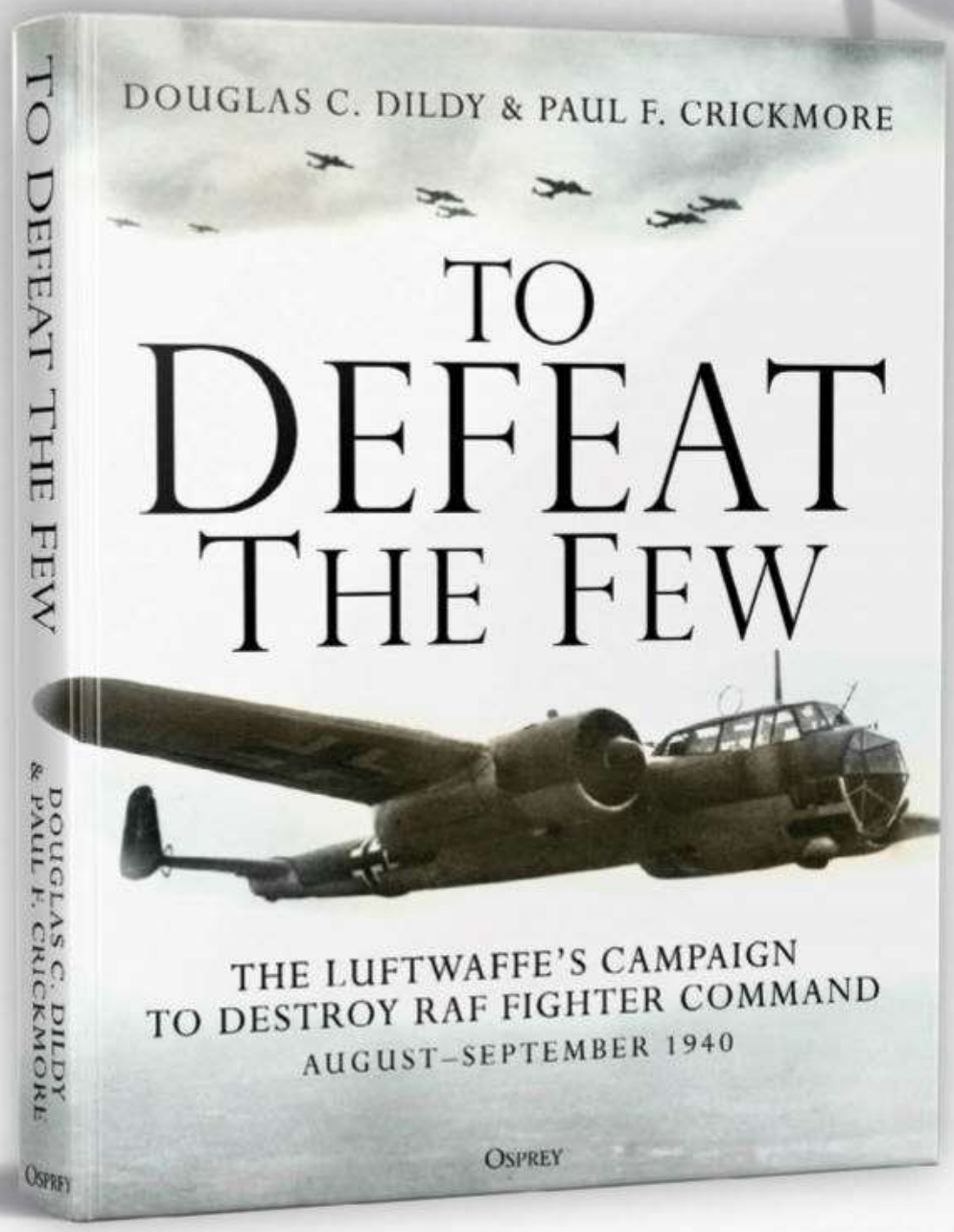
MIDWAY IS OUT NOW
ON DIGITAL DOWNLOAD, 4K ULTRA HD, BLU-RAY AND DVD

Images © Lionsgate

TO DEFEAT THE FEW

THE LUFTWAFFE'S CAMPAIGN TO DESTROY RAF FIGHTER COMMAND

AUGUST–SEPTEMBER 1940



'In order to establish the necessary conditions for the final conquest of England... I therefore order the Luftwaffe to overpower the English air force with all the forces at its command, in the shortest possible time.'

FÜHRER DIRECTIVE NR. 17

The Battle of Britain has acquired near-legendary status as one of the most iconic events of the 20th century. This new history, based on an exhaustive study of German records, explores the battle through the eyes of the Luftwaffe.

PRE-ORDER FROM ALL GOOD BOOKSHOPS AND ONLINE AT WWW.OSPREYPUBLISHING.COM

OSPREY PUBLISHING

Operator's Handbook

AH-64D APACHE

First emerging at the tail end of the 20th century, the Apache AH-64D is a multi-mission attack helicopter, designed to combat the changing face of warfare

Produced by Boeing originally for the US Army, the AH-64D 'Longbow' was a huge step-up from the A-class Apache gunship, fitted with a distinctive fire-control radar above its four-blade composite main rotor. This allows it longer-range weapons accuracy, cloaked object detection (both moving and stationary), classification and threat prioritisation of up to 128 targets in less than 60 seconds and greater situational awareness, real-time management of the combat arena and digital transmission of target locations.

From 2008, the AH-64D was upgraded to include increased digitisation, a joint tactical radio system, enhanced engines and drive systems, capability to control UAVs (unmanned aerial vehicles) – which have been used in the Iraq and Afghanistan wars – and improved landing gear. The Apache remains in service with armed forces all over the world, and has proven to be an invaluable asset during operations in Afghanistan for nearly two decades.

ARMAMENT

The M320 automatic cannon fitted to the front underside of the Apache fires 30mm High-Explosive Dual-Purpose (HEDP) shells, and carries 1,500 spare rounds on board. The M320 is capable of firing a devastating 625 rounds per minute, meaning short bursts are often used to maintain accuracy and reserve ammunition. In addition several different air-to-air and air-to-surface weapons systems are available to be fitted, to suit various mission requirements. These can include Hellfire missiles, CRV7 70mm rockets and Sidewinder missiles.

COCKPIT

With two separate compartments, the Apache's cockpit allows excellent battlefield visibility and is fitted with cutting-edge communication, weapon and navigational systems.

FUSELAGE
Designed for speed, manoeuvrability and stealth, the fuselage is distinctively styled and uses camouflage colours to match its operating environment.

T700-GE-701C ENGINES
Produced by General Electric, the T700 turboshaft engines allow the AH-64D Longbow a high vertical rate of climb (2,175f/pm) and max cruise speed (260k/ph).

COMPOSITE ROTOR BLADES
The AH-64D Longbow is fitted with a composite four-blade main rotor, allowing for increased payload, climb rate and cruise speed over earlier variants.

"THE APACHE REMAINS IN SERVICE WITH ARMED FORCES ALL OVER THE WORLD, AND HAS PROVEN TO BE AN INVALUABLE ASSET DURING OPERATIONS IN AFGHANISTAN FOR NEARLY TWO DECADES"

Illustration: Alex Pang

BOEING AH-64D APACHE LONGBOW

COMMISSIONED:	1997
ORIGIN:	USA
LENGTH:	58.17FT (17.73M)
RANGE:	1,900KM (FERRY RANGE)
ENGINE:	TWIN TURBOSHAFT T700-GE-701C
CREW:	2
PRIMARY WEAPON:	30MM M230 CHAIN GUN
SECONDARY WEAPON:	HELLFIRE MISSILES, 70MM ROCKETS

The Apache's distinctive Longbow sensor can be seen at the very top of the airframe, above the rotor blades

Source: Wiki / PD US Department of Defense

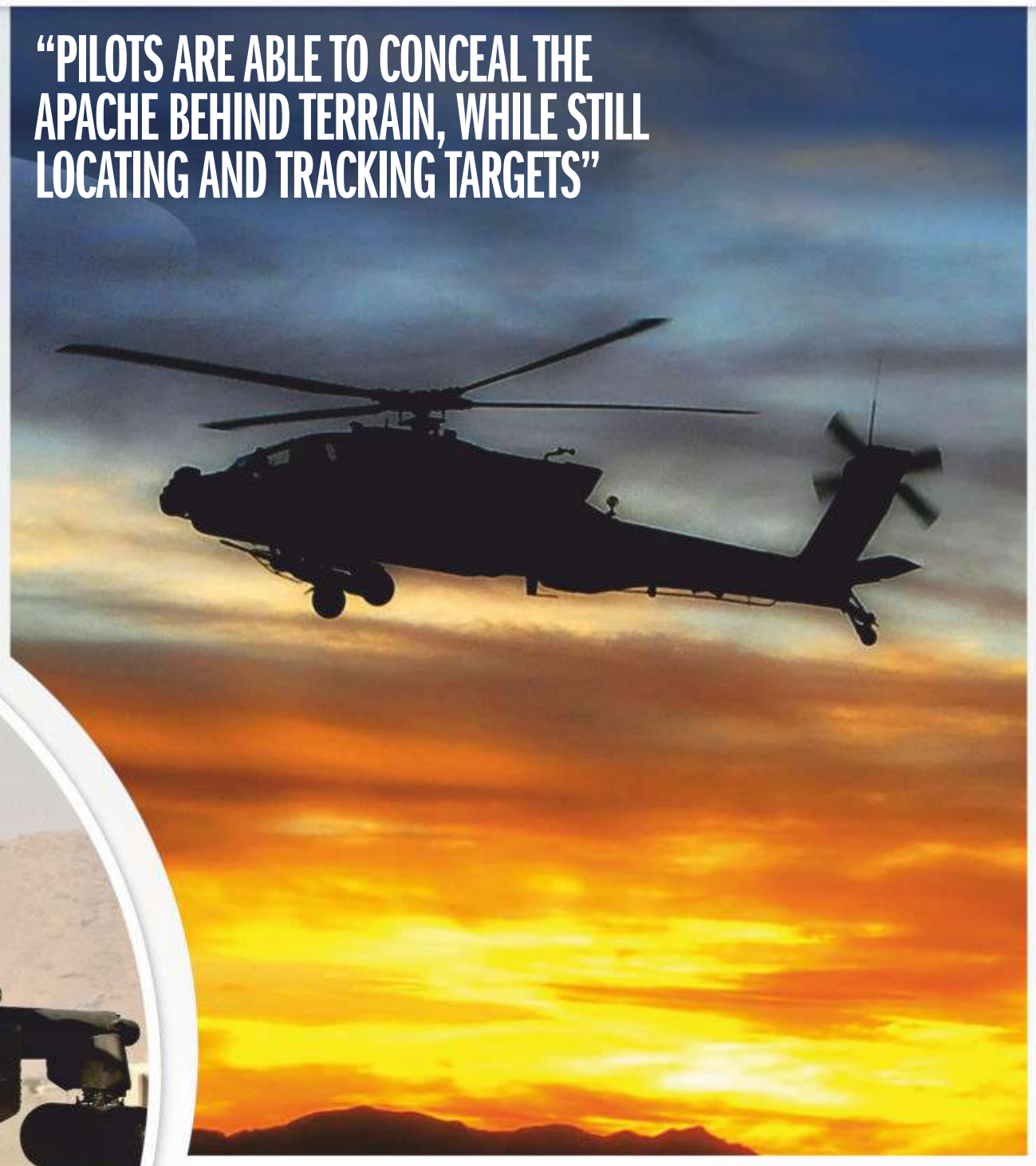
DESIGN

The major design feature of the AH-64D is the large 'Longbow' radome system built into the top of the Apache's mast, above the rotor blades. Through the systems within, this provides the pilot with combat information on the surroundings and enemies, such as target azimuth, elevation, range and velocity. This enables the crew to quickly and efficiently calculate a firing solution to best hit targets. Because the radome is positioned at the very top of the airframe, pilots are able to conceal the Apache behind terrain, while still locating and tracking targets.

An Apache without its Longbow system in place

Source: Wiki / SAC Tim Laurence/MOD

"PILOTS ARE ABLE TO CONCEAL THE APACHE BEHIND TERRAIN, WHILE STILL LOCATING AND TRACKING TARGETS"



Source: Wiki / DVIDSHUB

18+

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal, providing you various content: brand new books, trending movies, fresh magazines, hot games, recent software, latest music releases.

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site

AVXLIVE.ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open https://avxlive.icu

Various weapons systems can be fitted, to suit different mission requirements

Source: Wiki / FaceMePLS

An Apache AH-64D Longbow at Duxford D-Day Show, 2014

Source: Wiki / Airwolfhound

ENGINE

Twin turboshaft T700-GE-701C engines provide a combined total of 2,530kW. These bring a tremendous amount of power, giving the Apache a cruise speed of around 260k/ph (161mph) and a top speed of 279k/ph (173mph). Further upgrades to the engines and gear transmission were brought in with the AH-64E iteration of the helicopter in 2011. The British-licensed AH MK1 models are fitted with twin Rolls-Royce RTM322 engines.

Source: Wiki / US Army

***Above:** Chief Warrant Officer 3 Aaron Fouquette conducts systems checks on an Apache before going on mission*

The dual digital display screens used to display flight systems to the pilot

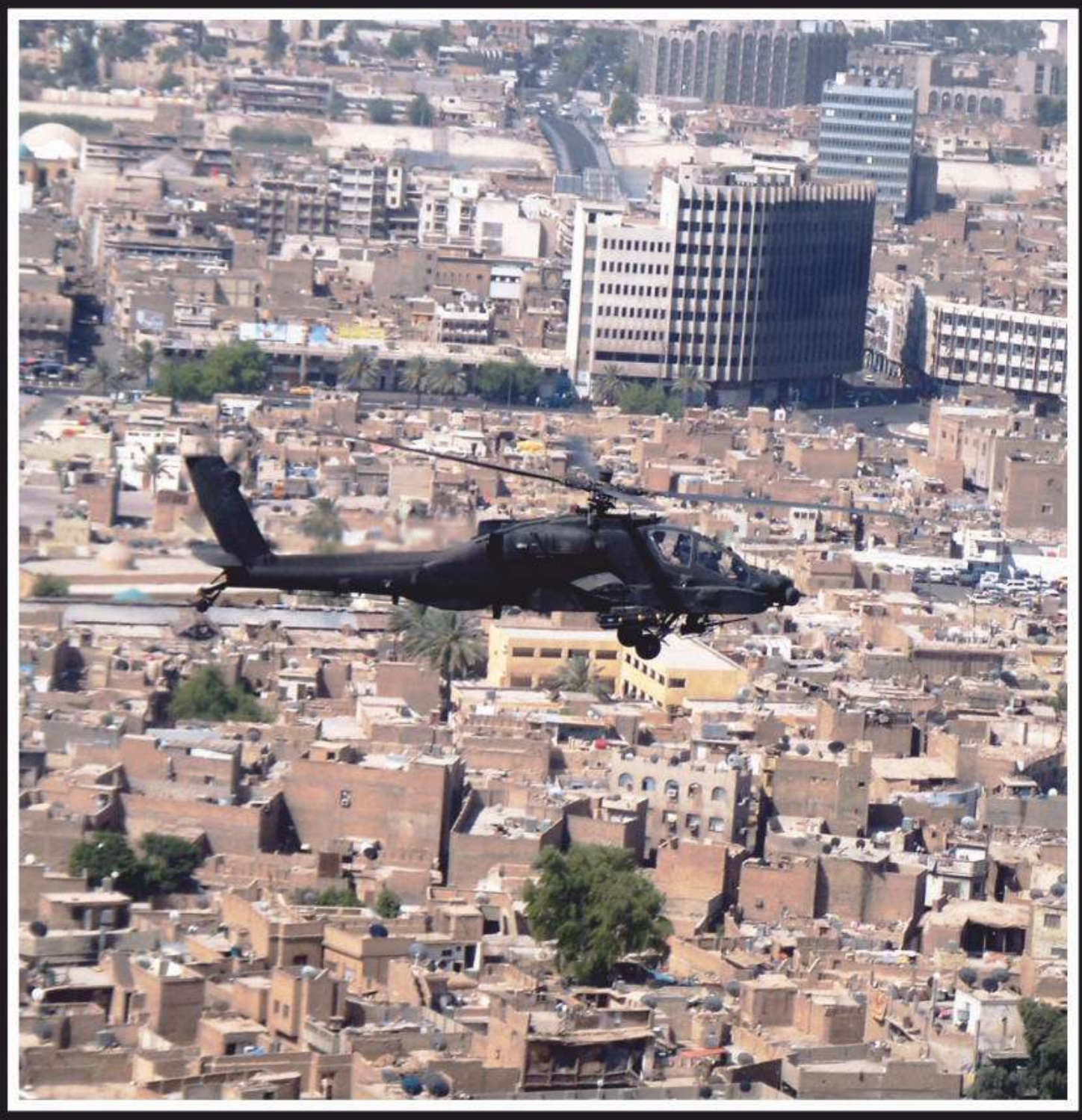
Source: Wiki / Graeme Main/MOD

COCKPIT

The Apache is designed with a split cockpit, with the pilot positioned in an elevated position behind the co-pilot, who also operates the weapons systems. The pilot's position affords greater visibility, however both sections of the cockpit can operate the flight and weapons systems, if required. The flight systems and sensors are displayed digitally on two screens. The pilot also has a Helmet Mounted Display (HMD), as well as the imagery from the Pilot Night Vision System (PNVS) which means the aircraft can be flown at night and in all weathers. The Co-Pilot Gunner (CPG) has controls for the Modernised Target Acquisition and Designation Sight (MTADS). This displays a video image in the cockpit that can be used in the day to find targets and aim the weapons, but it also has an infrared mode. The MTADS has a laser which can be used to determine the distance to a target, but it is also a coded laser that can direct the Apache's hellfire missiles on to a target.

Apache pilots are able to use HMD's in order to seamlessly monitor the helicopter's systems

Source: Wiki / Graeme Main/MOD



Source: Wiki / US Army

***Above**: An AH-64D over Baghdad, Iraq*

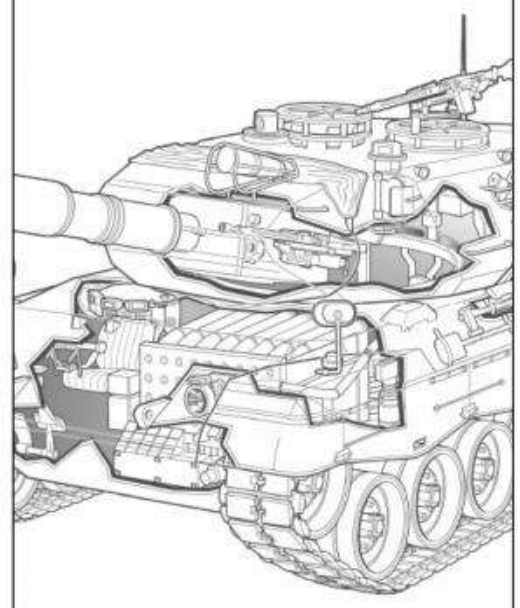
SERVICE HISTORY

The original Apache iteration, the AH-64A was first deployed during the US invasion of Grenada, in 1989, and soon afterwards served during the 1991 Gulf War. During Operation Desert Storm, Apache AH-64A's were sent to destroy Iraqi radar systems, enabling fast jets to then penetrate the enemy airspace and bomb high-priority targets. The modernised AH-64D 'Longbow' variant was delivered to the US Army in 1997 and was soon exported internationally, including to the Netherlands, Israel, Egypt, Singapore and Saudi Arabia. The British Army acquired a licence to produce its own variant of the Apache, the AH Mk1, to suit its own requirements. In Afghanistan it continues to serve in fire support roles during counterinsurgency operations.

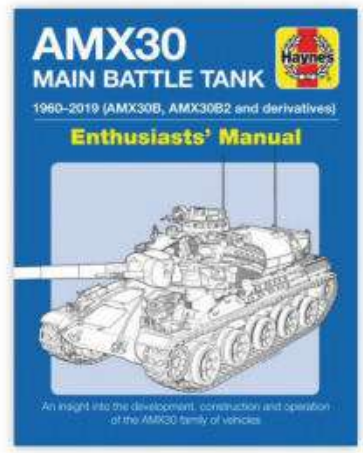
A British Army AH MK1

Source: Wiki / Graeme Main/MOD

MILITARY MANUALS FROM HAYNES



RRP £25.00



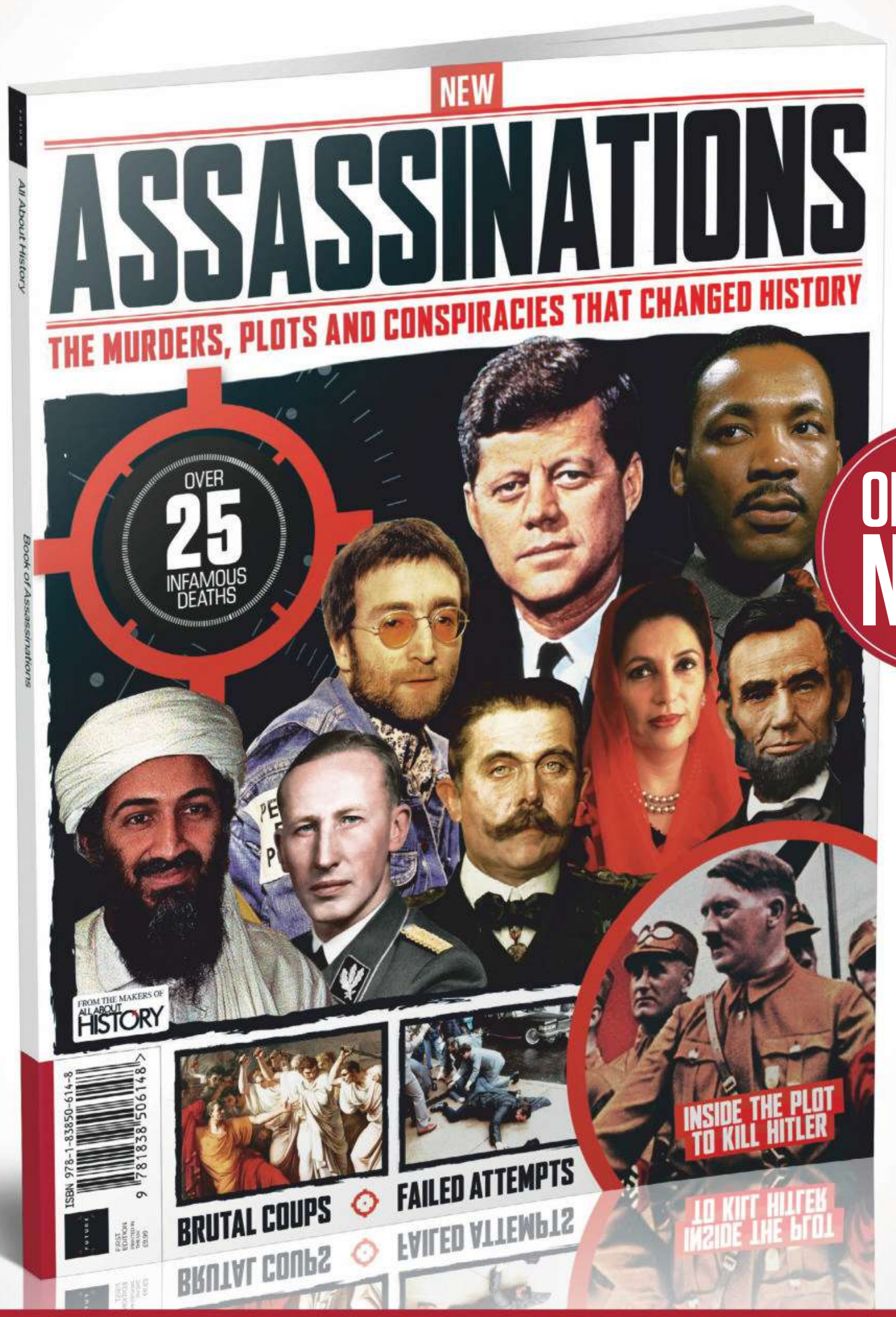
RRP £25.00

RRP £22.99

AVAILABLE AT HAYNES.COM/MILITARY AND ALL GOOD BOOKSHOPS

SOME DEATHS SHOCK THE WORLD, OTHERS CHANGE THE COURSE OF HISTORY

Delve into the coups and conspiracies behind history's most infamous murders. Including over 25 of the world's most powerful and influential figures, from Abraham Lincoln to Franz Ferdinand and JFK to Martin Luther King



FUTURE

Ordering is easy. Go online at:

www.myfavouritemagazines.co.uk

Or get it from selected supermarkets & newsagents

HOME FRONT

NEXT MONTH
BRITAIN'S SECRET ARMY
ISSUE 82 IS ON SALE 11 JUNE

76 WWII IN PHOTOS

80 years ago this month the German war machine crashed through France, Norway, Belgium and the Netherlands

74
Some fantastic museum collections available online

78
The latest films and books on your screens and shelves

82
Artefact of War: Brennan torpedo

www.historyanswers.co.uk

FACEBOOK /HistoryofWarMag

TWITTER @HistoryofWarMag

MUSEUMS ONLINE

Although heritage attractions have closed due to the Covid-19 coronavirus pandemic, museums still have fantastic facilities to explore military history online

The National Army Museum was reopened by Queen Elizabeth II in 2017 after a major renovation that began in 2014

Source: Wiki / Britishfinance

Inset images source: Wiki / PD

'IN CASE OF EMERGENCY'

The National Army Museum's website is a superb place to explore stories of Britain's land forces as well as a relevant new study of peacetime operations

The National Army Museum is a leading authority on the British Army and its impact on society from the British Civil Wars to the present day. A key component of the NAM is its aim to share stories of ordinary people with extraordinary responsibilities through its vast collection of over one million objects and archives. In the wake of the coronavirus pandemic, the museum's doors may be closed but its website is an excellent substitute. Its 'Explore' page has a huge range of articles that are divided into accessible 'Themes' such as: 'A Soldier's Life', 'Army Structure', 'Around the World', Culture, Sport and Leisure', 'Innovation and Adaptability', 'Politics and Protest' and 'War and Peace'.

Each article is peppered with unique photographs and objects from the museum's collection with topics that range from the birth of the British Army during the 17th century 'Restoration', the Victoria Cross and articles on the important role of women. There are also detailed histories on the numerous campaigns and wars that the army has been involved in as well as the regiments that fought in them. One highlight is 'Capturing the Army' – a fascinating look into pioneering war photography from the 1850s including the Crimean War, Indian Mutiny and Second Opium War.

The NAM's most recent article for 'Explore' is 'In Case of Emergency: The Army and Civil Assistance', which tells the story of how the British Army has supported the civil authority during peacetime events or crises. As the article explains, "Today, we trust the army and its soldiers to help maintain vital supplies and services. We welcome them when normal civilian resources are exhausted or have broken down. And, as the 2020 coronavirus outbreak shows, we rely on them in times of national emergency."

To assist UK public services during the current pandemic as of April 2020, approximately 20,000 military personnel have been mobilised as part of Operation Rescript in the newly formed Covid Support Force. The article explains in great detail how the armed forces are helping various organisations today and it also examines how the army has undertook domestic operations to maintain civil order in the past.

***Inset, left:** Two Scots Guards fire from a bedroom window at Latvian revolutionaries during the 1911 Siege of Sidney Street in London's East End*

***Inset, right:** 'Capturing the Army' shows unique pictures from the Crimean War including this photograph of Cornet Henry John Wilkin, an assistant surgeon in the 11th Hussars who survived the Charge of the Light Brigade*

Some events, such as the Peterloo Massacre and Bristol Riots in the 19th century, were notorious disasters. Others, such as the Siege of Sidney Street and Northern Ireland's 'Troubles' were controversial deployments. However, during the 21st century, the army has been an appreciated presence during operations that vary from dealing with severe flooding and terrorist attacks to providing security for the 2012 London Olympic Games. As the NAM explains, "Today's priority during times of national crisis is to use the army to help people in trouble – a role welcomed by society."

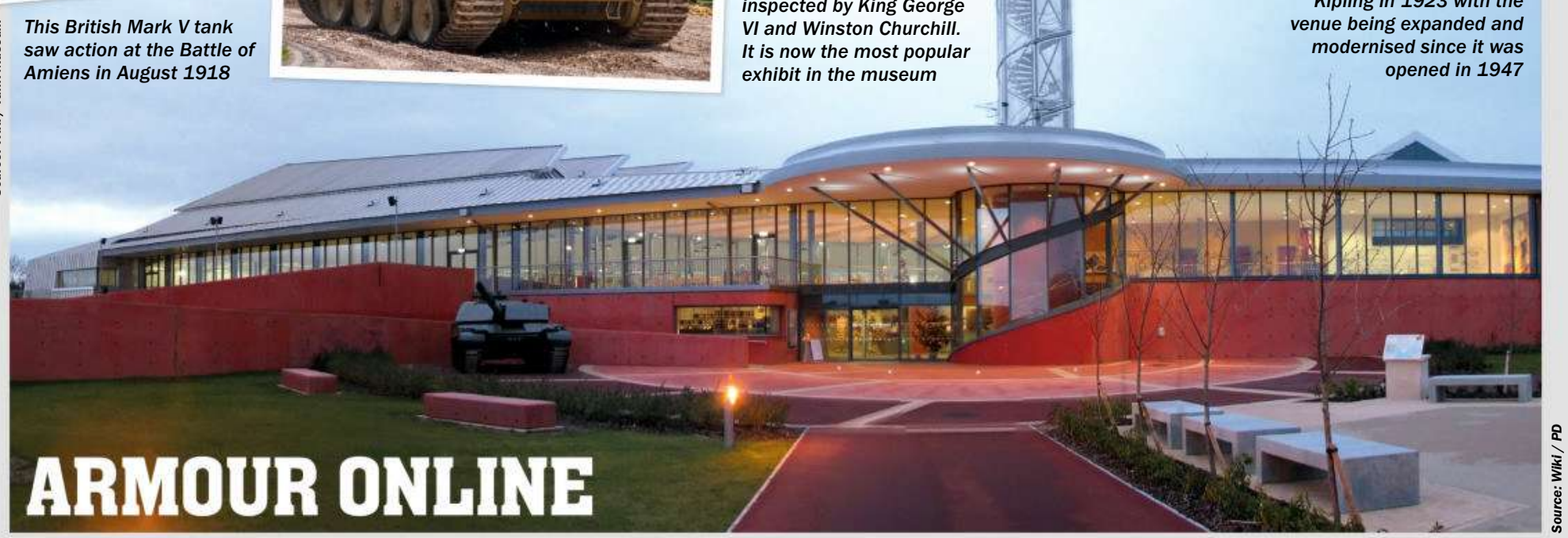
TO ACCESS THE NAM'S 'EXPLORE' PAGE VISIT: WWW.NAM.AC.UK/EXPLORE

Source: Wiki / Tank Museum

This British Mark V tank saw action at the Battle of Amiens in August 1918

Source: Wiki / PD

Tiger 131 was captured by the British in Tunisia in 1943 and formally inspected by King George VI and Winston Churchill. It is now the most popular exhibit in the museum



The idea for the Tank Museum was first suggested by Rudyard Kipling in 1923 with the venue being expanded and modernised since it was opened in 1947

Source: Wiki / PD

ARMOUR ONLINE

The Tank Museum is increasing its internet presence with video lectures, reviews, competitions and resources

With almost 300 exhibited vehicles from 26 countries, the Tank Museum in Bovington, Dorset, has the largest collection of tanks in the world along with the third largest collection of armoured vehicles. This includes examples of the oldest surviving combat tank – the British Mark I and the only working example of a German Tiger I heavy tank, the famous Tiger 131. The museum is also the home of the Royal Tank Regiment and Royal Armoured Corps.

With such an impressive collection and staffed by world-class experts, the museum is now diverting its efforts to boost its online presence. This will encourage tank enthusiasts to stay at home by combating boredom.

Plans are underway to bring the Tank Museum into homes via its Facebook, Twitter and Instagram pages along with its YouTube Channel. Museum curator David Willey will be featuring in a series of book and film review videos and there will be twice-weekly lecture videos (Tuesdays and Saturdays) featuring Willey and other experts discussing a range of related subjects. Elsewhere, the Education team will be hosting a weekly tank-themed competition for children and creating a page of resources to keep young enthusiasts occupied.

The museum can be followed extensively on its social media channels for free and can be supported by subscribing, liking, sharing or commenting.

FOR MORE INFORMATION VISIT: WWW.TANKMUSEUM.ORG

The Western Approaches Museum is located in and below Derby House. The bunker was known locally as 'The Citadel'

Images: Liverpool War Museum

A huge map of the Atlantic Ocean helped to plot the position of ships with the aid of a ladder

LESSONS FROM THE BUNKER

The Western Approaches Museum provides free virtual history tuition for schoolchildren about Merseyside's secret role during WWII

Beneath the streets of Liverpool is a labyrinth of rooms and offices that was the headquarters of the Western Approaches Tactical Unit. This reinforced concrete bunker complex was used by the Royal Navy, Royal Marines and RAF to monitor enemy convoys and U-boat 'wolf packs' during the Battle of the Atlantic. Their specific task was to safeguard British shipping in the Western Approaches (the seas west of the British Isles) and the HQ was mostly staffed by personnel of the Women's Royal Naval Service.

Now a preserved heritage attraction, the Western Approaches Museum is offering a series of 'Isolation History Lessons' aimed at primary school children but that are also suitable and interesting for everyone. Lessons will include an introduction to WWII, wartime rationing and entertainment, coding, evacuees, and secret rooms of the bunker. There are two worksheets per lesson, one for under-11s (KS2) and one of for over-11s (KS3). Both sheets give prompts for further research and if a child completes a project and sends it to the museum, they will post the best ones online.

A new film is launched every week, which enhances history as a topic for home schooling. These videos can found on the museum's Facebook and YouTube pages and all lessons are free, although donations are always welcome.

FOR MORE INFORMATION VISIT: WWW.LIVERPOOLWARMUSEUM.CO.UK/VISITING/ISOLATION-LESSONS

WWII THIS MONTH...

MAY 1940

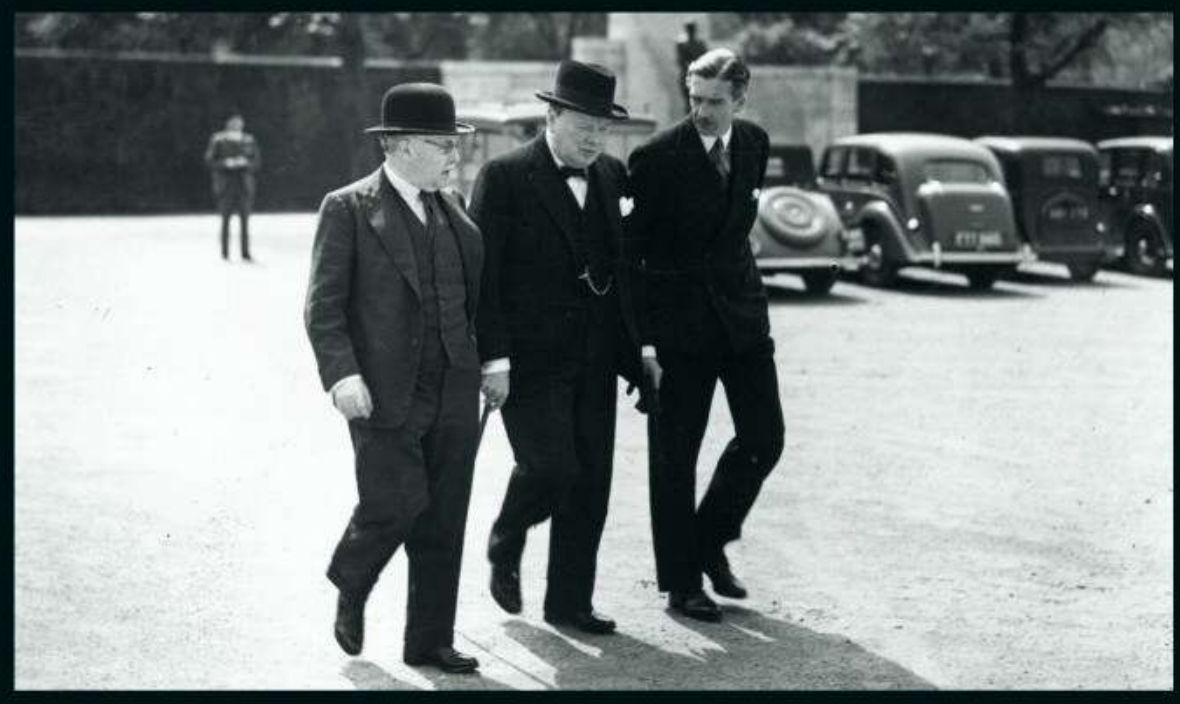
To commemorate 80 years since the Second World War, **History of War** will be taking a look at some of the key events taking place each month of the conflict

ROYAL REFUGEE

The Dutch royal family arrived in London after fleeing the German invasion of the Netherlands. The family eventually relocated to Canada, where they remained until the liberation of occupied Europe. Pictured is Prince Bernhard, future consort to Queen Juliana, carrying his daughter Princess Irene in an anti-gas crate. Bernhard would later return to the UK and in 1944 was made commander-in-chief of the Dutch forces, working alongside Allied commanders during the campaign to liberate the Netherlands.

A NEW PRIME MINISTER

After the invasion of France, Belgium and the Netherlands on 10 May, Prime Minister Neville Chamberlain met with King George VI to resign, and advised that Winston Churchill should be called upon to form a government. Chamberlain's government had been under intense pressure in parliament as a result of the disastrous military campaign in Norway. Churchill is pictured here with Anthony Eden, Secretary of State for Dominion Affairs, and Sir Kingsley Wood, Secretary of State for Air. Both men would serve in Churchill's cabinet as Secretary of State for War and Chancellor of the Exchequer respectively. Addressing parliament on 13 May, he stated, "I have nothing to offer but blood, toil, tears and sweat."



THE BEF IN BELGIUM

British troops manning a universal carrier watch as Belgian refugees pass by on the road west to Brussels, escaping the German advance.

NORDLAND ACTION

A firefighter tackles a blaze in Narvik, in northern Norway, after incendiary bombs dropped by the Luftwaffe set the city alight. Narvik saw some of the most intense combat of the Nazi invasion of Norway, and the city changed hands between Allied and German forces before the final surrender of Norwegian forces in June. British and Allied forces withdrew from Narvik by the end of May.

All images © Getty

REVIEWS

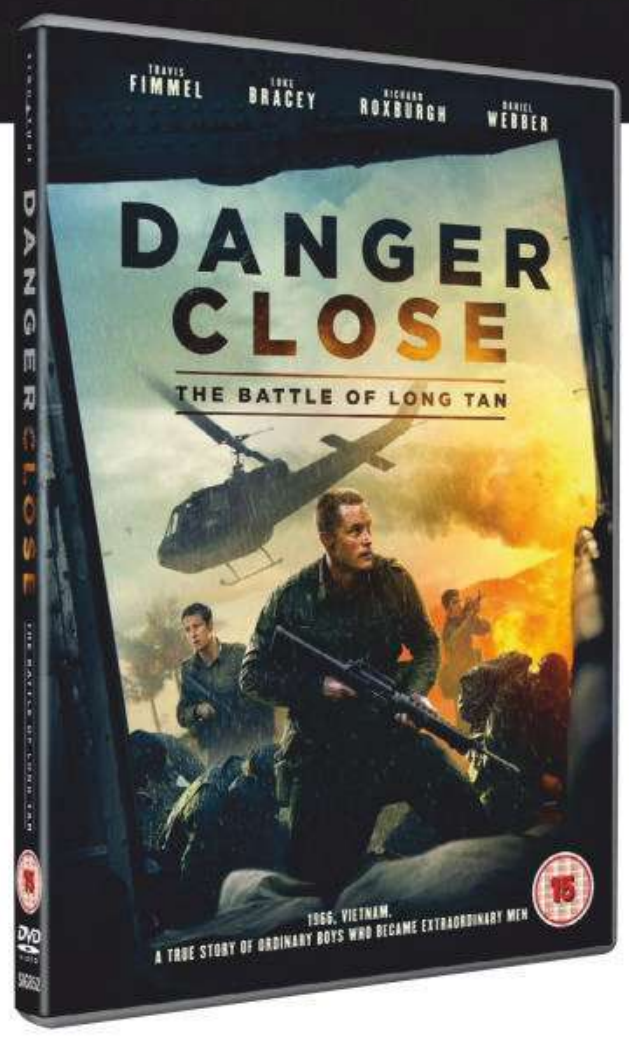
Our pick of the latest military history books and films

DANGER CLOSE

THE BATTLE OF LONG TAN

ONE OF THE VIETNAM WAR'S MOST INFAMOUS AGAINST-THE-ODDS BATTLES, AND THE AUSTRALIAN ARMY'S TOUGHEST, IS RETOLD ON THE BIG SCREEN

Director: Kriv Stenders
Starring: Travis Fimmel
Released: Out now



In August 1966, D company of the 6th Battalion, Royal Australian Regiment, was operating in the Long Tan area in South Vietnam, when it encountered Viet Cong forces. What was first believed to be a small platoon turned out to be an entire regiment, putting the Australians against nearly ten times their number. *Danger Close* is an intense retelling of the ensuing battle, recounting how these conscripts and volunteers – with an average age of just 20 – fought desperately against the odds and in the middle of a monsoon.

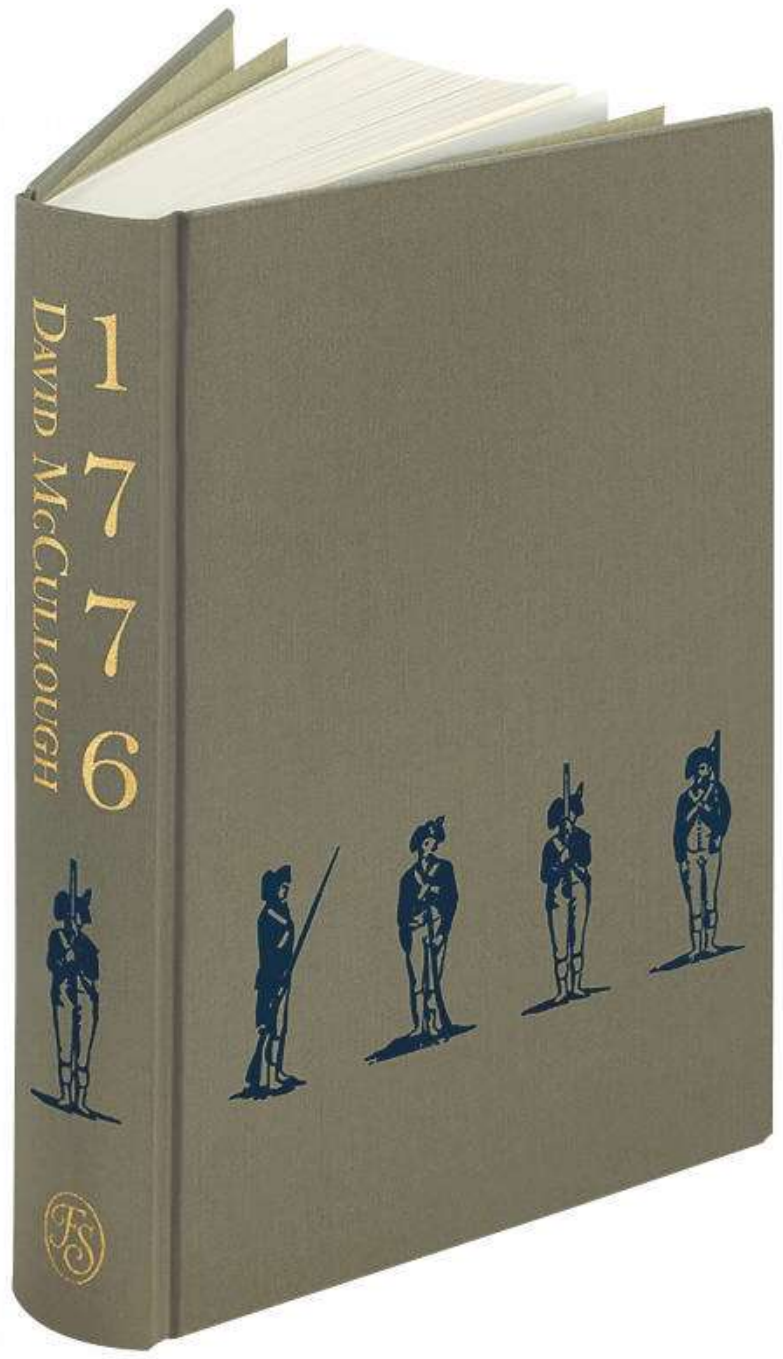
The filmmakers have not shied away from overt references to classic war films such as *Full Metal Jacket*, *Apocalypse Now* or *Platoon* – all iconic movies now embedded in the mainstream imagination of the Vietnam War. However, Long Tan was an Australian and New Zealander battle, and as such *Danger Close* presents the less well-known contribution of these countries to the conflict. Victoria native Travis Fimmel (*Vikings*' Ragnar Lothbrok) does an admirable job as the battle-hardened Major Harry Smith, a veteran of the also less remembered Malayan Emergency of the 1950s.

Producer Martin Walsh was involved in a 2006 documentary film on Long Tan, and this is apparent in the attention to detail and respect for accuracy on the screen. For viewers perhaps a little more knowledgeable about the battle, there is a huge amount of detail that remains true to the actual events in 1966, while those less familiar are not left behind. A large amount of focus is placed on the decisions that were made at all levels and their immediate and often severe consequences on the ground, with the New Zealand artillery teams behind the lines adjusting their guns to the frantic calls from the infantrymen on the frontline. A few degrees either way was the difference between life and death, and the filmmakers have done an honourable job conveying the heroic challenges faced by the real veterans of the battle. **TW**

1776

DELVING DEEPER INTO THE YEAR THE DECLARATION OF INDEPENDENCE WAS SIGNED

Author: David McCullough **Publisher:** Folio Society **Price:** £44.95



We have no shortage of books by esteemed authors and history luminaries that pass across our desks on this magazine, but few have come with introductions of their authors quite so intimidating in its prestige as this one. David McCullough, author of *1776*, has won the Pulitzer Prize twice, the National Book Award twice and a Presidential Medal of Freedom, the highest civilian honour in the United States, which he was given by President George W. Bush in 2006. Suffice to say, with *1776* we're in more than capable hands.

As the title intimates, this is a highly focused history of one of the most pivotal years in the War of Independence between the soon to be declared United States of America and the British Empire. Inspired to delve deeper into the year that the Declaration of Independence was signed during his acclaimed biography of John Adams, this book focuses mainly on George Washington, although it gives no short shrift to the lives and utterances of those around and against him.

While many of the key names, such as Washington and George III will be very familiar to even those with a passing understanding of the American Revolutionary period, the portrait that is painted of such men may be quite eye-opening. McCullough gives an even-handed and honest account of everyone's positions, standing back from expressing any particular judgement on their motivations or the veracity of their arguments. History, ultimately, has proven the rights and wrongs of the positions, who the heroes and villains of this story actually were, so instead we see the human frailty and fallibility of all those involved, which is a refreshing experience.

***George III, left, and George Washington, below, are explored in David McCullough's book,* 1776**

Source: Wiki / PD art

Washington comes across as a deeply moral and upright person, but also quite indecisive and prone to seeing defeat where actually victory is close at hand. It's been famously quoted that when George III was told that Washington intended to relinquish his commission and hand the army back to the Congress upon completion of the war he replied, "If he does that, he will be the greatest man in the world." But reading McCullough's account it comes as little surprise that Washington would have behaved in such a way, given just how principled he was.

For George III's part, a historical figure often painted as an all-out villain in less considered histories or adaptations that aim for higher drama, we get a picture of a king who cares very deeply for the continuation of the British Empire and who sees the rebellion across the Atlantic as a threat to stability and prosperity for all the colonies, not to mention for the British Isles themselves. While his ministers bicker about whether the rebels must be crushed now or the chance to crush them has passed, we see some relatively well-reasoned arguments to defend the status quo from those it best benefits.

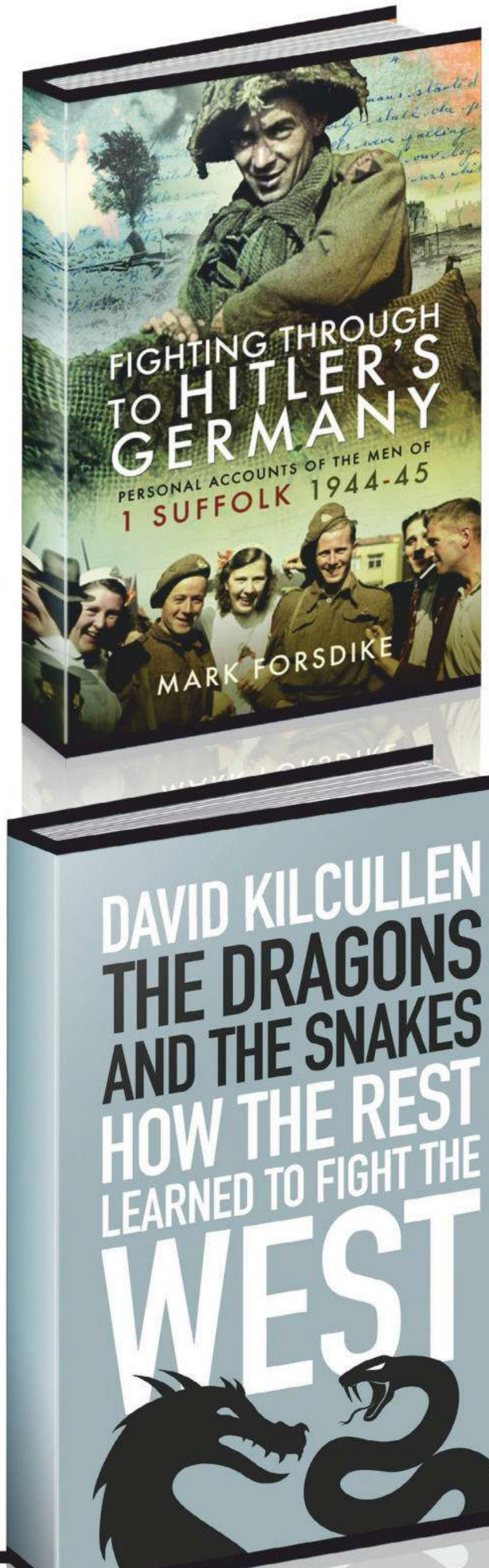
This is a very focused work and some broader understanding of the events prior and following 1776 would likely bring you greater enjoyment of this wonderfully constructed book. And of course this Folio reprint has all the glorious colour reproduction and quality binding we expect from the publisher. A truly engaging and worthy read. **JG**

FIGHTING THROUGH TO HITLER'S GERMANY

AN AFFECTIONATE AND OFTEN GRIPPING ACCOUNT OF THE OFFICERS AND MEN OF 1ST BATTALION THE SUFFOLK REGIMENT

Author: Mark Forsdike **Publisher:** Pen & Sword Books Ltd

Landing on Sword beach on D-Day, 1 Suffolks had the crucial task of capturing several fortified German positions, including one codenamed Hillman, which dominated the local area. Under the inspired leadership of Richard Goodwin and Geoff Ryley, they did exactly that – it cost Ryley his life. From that day on, the Suffolks were in the line, fighting their way through Normandy, Belgium, the Netherlands and into Germany itself, ending the war in Bremen. Along the way they suffered their share of casualties, becoming a veteran unit. Forsdike tells the story of the campaign from the viewpoint of the soldiers themselves, while putting their war into the context of the wider conflict. The knowledge and attention to detail in the book is impressive, with background information on many of the characters that is not only a tribute to the author's research, but draws the reader in. The chapters on the fighting in Normandy and northern France in particular are excellent, with a real feel for just how hard the struggle was. Throughout, Forsdike's obvious admiration for the men whose story he is telling, is obvious. In his own words, "The Suffolk soldier is by his very nature a quiet, unassuming man. He does not seek glory, nor does he chase fame." He then continues, "Though his actions were gallant and his dependability could always be assured, he never seemed to get the credit he deserved for his efforts." Having served in the Suffolk's successor regiment, I can wholeheartedly agree with his assertion, and hope that this book goes some way to remedy that situation. **JT**



THE DRAGONS AND THE SNAKES

HOW THE WEST'S ENEMIES LEARNED FROM 21ST CENTURY CONFLICT TO BECOME A SERIOUS THREAT TO AMERICA AND ITS ALLIES AND DISABLE THEIR MILITARY ADVANTAGE

Author: David Kilcullen **Publisher:** Hurst & Co **Price:** £20

In 1993, CIA director R. James Woolsey cautioned Western powers about letting their guard down after the collapse of the USSR. He stated, "We have slain a large dragon, but we live now in a jungle filled with … poisonous snakes." David Kilcullen brings to this dialectic his many years of experience as a strategist and counterinsurgency expert. The author's impressive credentials include having served as chief strategist in the Office of the Coordinator for Counterterrorism at the US State Department.

From the 1990s onward, Kilkullen says, we have seen troublesome snakes, such as ISIS, unexpectedly transformed into formidable dragons, capable of standing up to the might of Western military power. An example cited is the breakout of Islamic State across Iraq and Syria as recently as 2014, which was as a huge setback for the US and its allies seeking to stabilise Iraq. It also showed that – just as the dragons had been learning from the snakes over the past decade or more – non-state actors were copying state techniques and deploying levels of technology and lethality previously restricted to governments. "The snakes," Kilkullen says, "have learned to adapt their warfare and their systems to put the West on the back foot."

The author's recommendation is for a return to offshore balancing, disengaging from permanent wars of occupation, ceasing any attempt to dominate rivals or spread democracy by force and focusing instead on preserving and defending our long- term viability. "Rather than dominating potential adversaries, our objectives should be … to prevent them from dominating us, to do so at an acceptable and sustainable long-term cost, and to avoid any action that harms the prosperity and civilizational values that make our societies worth living in." **JS**

GET HISTORY OF WAR FROM £2.38 PER ISSUE!

ENJOY INSTANT READING

Our digital editions come with the same features included in the print edition!

This offer is ONLY available via our online shop

www.myfavouritemagazines.co.uk/ward/DIGCSP20

Available on iOS or Android

BRENNAN TORPEDO

© Getty

Source: Royal Engineers Museum

The Brennan was the first torpedo to have a fish-shaped cross-section, which is still the standard shape for torpedoes today

***Inset:** Louis Brennan was made a companion of the Order of the Bath for his achievements. His other innovations included a successfully patented gyroscopically balanced monorail and extensive designs for helicopters*

This self-propelled underwater missile was the world's first practicable guided weapon and was designed to protect British harbours

Patented by Irish-Australian inventor Louis Brennan, his eponymous torpedo was a maritime first. The term 'torpedo' had been in use since the American Revolution to describe a towed maritime explosive charge. During the American Civil War, 'torpedoes' described contact mines that used an air-filled demijohn. Austro-Hungarian naval officer Giovanni Luppis had developed a self-propelled torpedo prototype in the 1850s that was effectively a clockwork fire ship but the concept was limited.

Brennan's 15-foot (4.6 metres) long torpedo was innovative because it was wire-guided. Designed for harbour defence, its two steel drums carried several thousand yards of wire that were connected to shore-based, steam-powered winding engines. These engines could provide sensitive control over the wires to steer the torpedo towards its target. It had a consistent depth of 12 feet (3.7 metres) underwater and a speed of 27 knots (14 m/s). A naval officer could electrically control the torpedo from a telescopic steel tower or from an elevated position in a ship.

Armed with a 200-pound (91 kg) warhead, Brennan's torpedo proved its practicality during Admiralty tests when it hit a floating fruit basket at 2,000 yards (1,829 metres) and demonstrated an ability to turn through 180 degrees. In service with the Royal Engineers from 1890, Brennan torpedoes were installed in 15 stations across the British Empire and became a standard harbour defence until they were decommissioned in 1906. This was because guided-missile technology had moved on from static bases to destroyers that were armed with torpedoes. This pictured example is the only remaining original Brennan missile in existence and is exhibited at the Royal Engineers Museum.

ROYAL ENGINEERS MUSEUM

The Royal Engineers Museum tells the story of Britain's regiment of sappers and British military engineering.

FOR MORE VISIT: WWW.RE-MUSEUM.CO.UK

HISTORY of WAR

Future PLC Quay House, The Ambury, Bath BA1 1UA

Editorial
Editor-in-Chief **Tim Williamson**
timothy.williamson@futurenet.com
Senior Designer **Curtis Fermor-Dunman**
Features Editor **Tom Garner**
Production Editor **Tim Empey**
Senior Art Editor **Duncan Crook**

Contributors
Michael Haskew, Miguel Miranda, Craig Moore, Jules Stewart, Jon Trigg, William Welsh

Main cover image
Alamy

Photography
Alamy, Getty, Alex Pang
All copyrights and trademarks are recognised and respected
Advertising
Media packs are available on request
UK Commercial Director **Clare Dove**
clare.dove@futurenet.com
Senior Advertising Manager **Amanda Burns**
amanda.burns@futurenet.com
0330 390 6036
Account Manager **Garry Brookes**
garry.brookes@futurenet.com
+44 020 3970 4176

International
History of War is available for licensing. Contact the International department to discuss partnership opportunities
International Licensing Director **Matt Ellis**
matt.ellis@futurenet.com

Subscriptions
Email enquiries **contact@myfavouritemagazines.co.uk**
UK orderline & enquiries **0344 848 2852**
Overseas order line and enquiries **+44 (0) 344 848 2852**
Online orders & enquiries **www.myfavouritemagazines.co.uk**
Head of subscriptions **Sharon Todd**

Circulation
Head of Newstrade **Tim Mathers**

Production
Head of Production **Mark Constance**
Production Project Manager **Clare Scott**
Advertising Production Manager **Joanne Crosby**
Digital Editions Controller **Jason Hudson**
Production Manager **Nola Cokely**

Management
Chief Content Officer **Aaron Asadi**
Commercial Finance Director **Dan Jotcham**
Brand Director **Evan Kypreos**
Head of Art & Design **Greg Whittaker**

Printed by William Gibbons & Sons Ltd

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU www.marketforce.co.uk Tel: 0203 787 9060

ISSN 2054-376X

All contents © 2020 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be used, stored, transmitted or reproduced in any way without the prior written permission of the publisher. Future Publishing Limited (company number 2008885) is registered in England and Wales. Registered office: Quay House, The Ambury, Bath BA1 1UA. All information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this publication. Apps and websites mentioned in this publication are not under our control. We are not responsible for their contents or any other changes or updates to them. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.

If you submit material to us, you warrant that you own the material and or have the necessary rights/permissions to supply the material and you automatically grant Future and its licensees a licence to publish your submission in whole or in part in any/all issues and/or editions of publications, in any format published worldwide and on associated websites, social media channels and associated products. Any material you submit is sent at your own risk and, although every care is taken, neither Future nor its employees, agents, subcontractors or licensees shall be liable for loss or damage. We assume all unsolicited material is for publication unless otherwise stated, and reserve the right to edit, amend, adapt all submissions.

We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards. The manufacturing paper mill and printer hold full FSC and PEFC certification and accreditation.

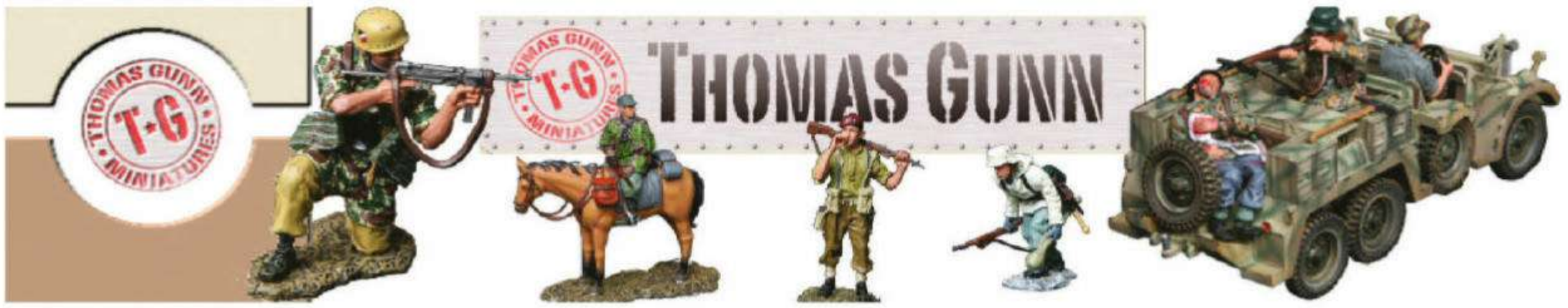
ipso. Regulated

Widely Recycled

FUTURE
Connectors. Creators. Experience Makers.

Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR)
www.futureplc.com

Chief Executive **Zillah Byng-Thorne**
Non-executive Chairman **Richard Huntingford**
Chief Financial Officer **Penny Ladkin-Brand**
Tel +44 (0)1225 442 244



ADOLF GALLAND'S FLITZER

FELIXSTOWE FLYING BOAT

HANDLEY PAGE BOMBER

STANFORD TUCK'S HURRICANE

WWW.TOMGUNN.CO.UK

EMAIL:WELCOME@GUNNCLUB.CO.UK

AVAILABLE DIRECT FROM US AND FROM ALL GOOD QUALITY SOLDIER STOCKISTS THROUGHOUT THE WORLD.

THOMAS GUNN MINIATURES

UNIT 21, DEVERILL ROAD TRADING ESTATE, SUTTON VENY, WARMINSTER, WILTSHIRE, BA12 7BZ

TEL: 01985 840539